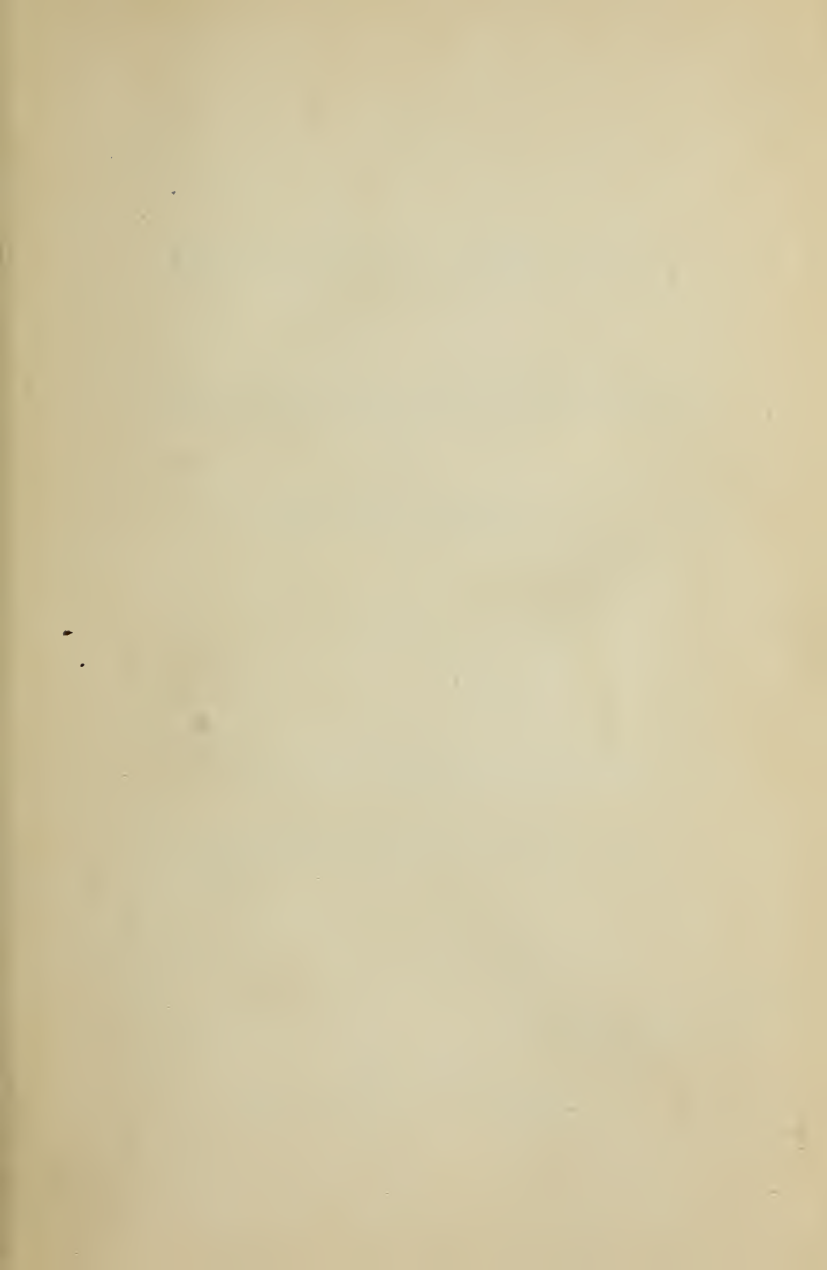


LIBRARY OF CONGRESS.

371210
Chap. Copyright No.

Shelf ... P23 ...

UNITED STATES OF AMERICA.



THE
AGNOSTIC GOSPEL:

A REVIEW OF HUXLEY ON THE BIBLE;
WITH
RELATED ESSAYS

BY HENRY WEBSTER PARKER,

LATE PROF. NAT. SCIENCE, IOWA COLL.

Author of

"The Spirit of Beauty: Essays Scientific and Æsthetic," etc.



JOHN B ALDEN, PUBLISHER.

1896.

BT 1210
.F23

Copyright, 1897.6

BY

HENRY WEBSTER PARKER.

THE LIBRARY
OF CONGRESS
—
WASHINGTON

PUBLISHER'S NOTICE.

From D. S. GREGORY, D.D., LL.D., ex-Pres. Lake Forest University,
Managing Editor of the Standard Dictionary:

"I have examined with some care the manuscript of Dr. Henry W. Parker's 'The Agnostic Gospel, with Related Essays.' I know of no one in this country who has such special qualifications for dealing with the subjects. He is thoroughly acquainted with the scientific and philosophical theories and points involved; is keenly discriminating and incisive in his critical thinking and reasoning; appreciative and sympathetic in spirit, and genially humorous in tone and temper. To all this he adds literary quality of high order, exhibited in the pungency and raciness of his style and the breadth of allusion and illustration."

BY THE SAME AUTHOR.

THE SPIRIT OF BEAUTY.

The Spirit of Beauty: Essays, Scientific and Æsthetic. By Prof. Henry W. Parker. Large 12mo, cloth, 75 cents. Third edition. New York: John B. Alden, 10 Vandewater Street. 1895.

"I have already read a large part of the book, and I have been delighted, instructed, and morally animated. It gives rich, delicate, and robust expression to a various knowledge, as well as to fine, devout, and far-reaching thought. I have not for long taken up a book which has interested me so immediately, or refreshed me so abundantly."—REV. R. S. STORRS, D.D., Brooklyn, N. Y.

"An admirable treatment of a widely related theme. The book is none the less profound for being so pungent."—EX-PRES. JULIUS H. SEELYE, LL.D., Amherst College.

"I appreciate it highly. The incisive but graceful style is worthy the pure and elevating sentiments and conceptions which it inculcates. I feel a singular sympathy with its way of thinking, and shall embrace every proper opportunity to call attention to a book so brilliant and so noble in its aims."—PROF. ALEXANDER WINCHELL, LL.D., Michigan University.

"I know Prof. Parker chiefly by the articles he gave me for the *North American Review*. These gave me the highest regard for him as an original, sound, and deep thinker. I have repeatedly characterized his article on the natural theology of art as the best paper that passed under my hands during the ten or eleven years of my editorship. My belief is that Mr. Parker's æsthetic capacity and culture are unsurpassed among us."—PROF. A. P. PEABODY, D.D., of Harvard University.

"The author is a naturalist and is quite familiar with the facts and views of Darwin, Spencer, and Haeckel; and, whatever restrictions he may make upon them, he has made as a man who has studied the subject from the inside. The observation of facts in the organic and inorganic worlds is good."—*Science*.

"In Prof. Henry W. Parker's volume we have just one of those protests against the recent schools of philosophical sensationalism which are sure to be raised, sooner or later, in the name of æsthetics. We welcome everything that will bring intelligent people to see that it is not dogmatic orthodoxy alone or the limited and perhaps narrow interests of sectarian religion which are assailed by this philosophy, but the whole spiritual theory of man."—*N. Y. Independent*.

CONTENTS.

I.

HUXLEY AND HEBREW TRADITION.—His Genesis as Controversialist, 1—His Humor and Combativeness, 3—The Automatism Lecture, 6—Sensational Science, 8—The Method of Zadig, 10—Fighting Windmills, 11—Misrepresentation of the Doctrine of Creation, 12—The Milton Lecture, 14—The Creation of Vegetal Life, 17—The Creation of Animal Life, 19—Gladstone and Genesis, 21—The Creation of Mammals, 23—Doing His Work Thoroughly, 24—Doing Justly and Loving Mercy, 25—Second Reply to Gladstone, 26—Pettifogging For or Against Genesis, 28—Huxley's Theory of a Theory in Genesis, 30—Was the Hebrew Writer a Hebrew? 33—The Second Chapter of Genesis, 35—"The Manufacture of Eve," 37—The Temptation in the Garden, 40—The Deluge, 41—The Question of the Deluge Locality, 42—Feats of the Mythologizers, 46—Huxley's Inexpensive Wit, 47—Borrowed Thunder, 48—An Old Truth Stretched Out of Shape, 49—The Beauty of the New Shape, 50—Carlyle's Protest, 51—A Variety of Assumptions, 53—Humors of the New Criticism, 55—Huxley and Bibliolatry, 60—Bible Piety, Past and Present, 61—Huxley's Proclamation, 1894, 62.

CONTENTS.

II.

HUXLEY AND CHRISTIAN TRADITION.—The Affirmative Side, 72—New Confirmative Discoveries, 73—Huxley's Singular Discoveries, 75—What He Knows About the Spiritual World, 76—His Analysis of the Gospels Not New, 77—The Gospels Severally, 78—His Acknowledgment, 80—His Supernaturalism, 81—What is the Supernatural? 82—What is the Christian Religion? 83—The Christian Religion Not Decaying, 84—The Religion of Naturalism, 88—He Eulogizes the Bible, 89—His Two Worlds, 92—His Rules of Nature, 93—His Inconsistency on this Subject, 95—Conditions are Not Cause, 96—Geology Shows Intervention, 98—His Examples of Natural Law, 99—The Dilemma He Offers, 100—Prayer, 101—His Possible God, 103—The Bishop and Miracles, 104—Scientific Men as Sharp and Veracious, 105—Scientific Accuracy, 106—Huxley's Veracity, 107—Eginhard's Miracle-Working Relics, 109—Were the Jews Credulous? 110—Huxley's Originality, 112—He Chooses the Worst Interpretations, 114—The Gadarene Demoniac, 115—The Destruction of the Swine, 117—Strauss and Huxley on Transfer of Ills, 118—Belief in Evil Spirits, 121—A Possible Inductive Theory, 122—Oriental Dualism, 123—Huxley's Genera and Species of Christianity, 125—Who Are Biblical Scholars? 127—Witness to the Miraculous, 127—No Witnesses to be Accepted, 129—Huxley's Science, 130—The Apocalypse, 131—The Earth's Destruction, 132—The Day of the Lord, 134—The Coming of Christ and the New Earth, 135—The Christian Era Prefigured, 137—Huxleyan Praise of Christianity, 141.

CÖNTENTS.

III.

FALSE REVELATIONS OF THE UNSEEN.....	145
--------------------------------------	-----

IV.

ARGUMENTS FOR THE UNSEEN	160
-------------------------------	-----

V.

A UNIVERSE IN LITTLE—A DREAM.....	177
-----------------------------------	-----

VI.

THE KNOW-NOTHING PHILOSOPHERS	191
-------------------------------------	-----

VII.

SOME MORAL ADJUSTMENTS	199
------------------------------	-----

VIII.

THE CHRISTIAN'S AGNOSTICISM AND GNOSIS.....	207
---	-----

PREFACE.

IN the first two papers following, scientific criticism is applied to Huxley and his scientific criticism, and with no more freedom of language than his writings abundantly exhibit. The aim throughout has been to express everything with exactness, using the fittest word whatever it be, mild or otherwise.

The occasion was a request in February last, by the Philosophical Society of Great Britain, to criticise Huxley's proclamation in *Nature*, Nov. 1, 1894; and the paper was read and printed a few weeks later. This led to a careful reading of his Biblical volumes, and the beginning of this review some time prior to his death.

The examination proves that to a considerable extent he was taken too seriously by his admirers and probably by his opponents, whose replies to him have not been read by the author of this volume; also that his Biblical papers

are in surprising contrast with the excellence of his biological investigations. However, he disclaims originality in these papers or some of them, though he is very original indeed in some of his notions, as for instance in respect to examples of natural law, noticed in the second paper of this book.

The two volumes reviewed are confidently entitled "Science and Hebrew Tradition" and "Science and Christian Tradition," but turn out to be mostly literary, instead of scientific in the sense that might well carry with it the prestige of Huxley as a naturalist. But, they are doubtless as good as anything that can be said adversely to the Bible; and the titles and authorship, especially the assumption of the august name of science, challenge a somewhat extended review. Humphrey Ward, writing in the *New York Tribune*, says that Huxley's younger scientific friends saw in him "the great leader, the protagonist in the struggle between truth and superstition." Protagonist means leader, but more strictly the chief actor in a drama; and if Huxley's Biblical battlings are very like a stage affair, it is well to know it.

Incidentally the writer of this (a theistic evolutionist) seeks to clarify some things not commonly well understood, or at least to put some questions in a more reasonable shape. It will be seen that he is sufficiently independent in his apprehension of Holy Writ, and also that he is well aware of the mistakes sometimes made in forcing the text into agreement with the details of science, especially by those who have not made science a systematic, prolonged, and practical study.

The essays appended to the first two are independent, but in close relation with these. The third was published in the *Bibliotheca Sacra*; the fourth in the *Forum*; the fifth in a provincial volume, except the appended reflections on Time, which in a more expanded form appeared in the Chicago *Advance*.

Since this volume was finished and the above preface written, an article on Professor Huxley by one of his associates, Mr. Richard H. Hutton (editor of the London *Spectator*), has appeared in the September *Forum*. It empha-

sizes the Professor's inconsistencies, combative disposition, and humor—the last especially of the quality described in this volume. Speaking of a paper by Huxley on the question, “Has the frog a soul?” Mr. Hutton says: “I am sure that he must have written it with an ironical smile, foreseeing how he would puzzle most of his hearers with his biological statements. He pointed out that if the frog has a soul at all, it must have two souls, for if the spinal cord is divided, both the divided parts manifest separately precisely the same kind of purposive action, though they do not coöperate. . . . I do not suppose that Professor Huxley himself had any distinct opinion on it. . . . But the real object of Huxley's paper was to bewilder; and, with the greater part of the Metaphysical Society, he certainly succeeded.” This instance of Huxley's humorous style of puzzling is of interest as confirming the interpretation put on much of his writing, in the following pages, where his intention is not so immediately obvious. The real puzzle is that any members of the Metaphysical Society could have been bewildered by his ascription of purposive action and even “rational principles” to spinal or

other reflex action, after it has become such by habit or descent.

In the September *North American Review* is an article on Huxley by the distinguished Professor William H. Flower, F. R. S. He puts very cleverly in the form of laudation a criticism that is as severe as true: "He was also free from a quality which paralyzes the effective action of many men of great mental capacity, the faculty of seeing something at least of both sides of a case at the same time."

Though he did not originate the idea, Huxley says he made the singular discovery that the ecclesiastical Moses—whatever that may mean—was a mere traditional mask. Under what mask the English Moses led many into agnosticism, and into what Promised Land he conducted them, is answered in this volume.

NOTE.—The "mythopœic faculty" is a phrase often used by Huxley and others, meaning the myth-making tendency, properly of the "early human fancy," as Lang expresses it. The phrase is used by the destructives to sweep away much of history, down to and including the New Testament. But they are the modern mythopœists. The word applies to those who would convert fact into myth quite as well as to those who may be supposed to have converted myth into fact. The destructives are myth-makers. This note is suggested by reading in Dr. Nixon's new book, "How Whitman Saved Oregon," the proofs that Whitman did save it—a fact that in its main particulars was reduced to a myth by some over-wise Oregonians only a few years after Dr. Whitman's death in 1847.

THE AGNOSTIC GOSPEL.

I.

HUXLEY AND HEBREW TRADITION.

ACCORDING to the testimony of a scientific and congenial acquaintance of Professor Huxley, in 1876, he was not serious in his onslaughts on spiritual philosophy and religious beliefs.* As the remark was understood, the professor was like many persons of his general way of thinking; he cared for none of these matters, except as subjects for wit or argument, though he disowns the character of a Gallio—the disavowal very likely a part of his sword-practice, or of the character he assumed of an earnest or half-earnest iconoclast.

Having gained much eminence in scientific researches, and having read widely, with an intellectual interest in pretty much everything, he amused himself and exercised his rhetorical

* The remark was made to the liberal lay president of a secular college, and by him repeated to the writer of this review.

and polemical gifts on a variety of subjects, including the Biblical, which he sought to make especially amusing. In so doing, and at the start, he found Hume most to his mind, and later invented the word agnostic, probably having noticed Sir William Hamilton's quotation of the Greek "*Agnosto Theo*—to the unknown God," and changing the adjective into agnostic as an antithesis in form to Gnostic, which he speaks of as suggesting the new word; and he relates that he was a member of a society in which every one was an *ist* (pantheist, theist, atheist, etc.) except himself, and feeling that he was the one fox without a tail, he looked about for an appendage and hit upon agnostic as one he could sport.

Here was a new species of *ism*, though only new in name, and of course he felt bound to live up to it, much as the æsthete tried to live up to a choice piece of porcelain. He took up the rôle of a leader of doctrine, and continued to pose himself as such, cheered on by sympathizers and taking advantage of his high position as biologist. But he is not a representative of philosophical agnosticism, nor is he in any respect a philosopher, though he stumbles about in some digressions about natural law and cause. He acknowledges that he took his cue from Hume, Hamilton, Mansell, etc.; but he says that he does not

much care to speak of anything as "unknowable"—in fact, he remarks, it was long ago that he once or twice made the mistake of so speaking, and even wasted a capital U—that is, he was foolish enough to talk about the Infinite. In 1889, he reduces all to this: "It is wrong for a man to say that he is certain of the objective truth of any proposition unless he can produce evidence which logically justifies that certainty; this is what agnosticism asserts; and, in my opinion, it is all that is essential to agnosticism." The reader, therefore, need not look in his books for the agnostic gospel of the metaphysicians, though some of the papers are entitled Agnosticism; and, hence, need not look in this review for the philosophy of knowledge, or of the Infinite.

HIS HUMOR AND COMBATIVENESS.

Such, in brief, and with more of the agnostically required evidence than appears in his Anthropological Study of the evolution of Hebrew religion, was the genesis and evolution of Huxley as controversialist; and to complete the statement, his mingled humor and pugnacity must be taken into account as incentives. Personally, he is reported as a man of genial kindness. His conversational wit was noted; and his magazine writings and popular lectures

are often enlivened by wit and pervaded by humor. He frequently has an air of assumed gravity of the humorous quality. His sarcasms and ironies are mostly smiling rather than caustic and bitter—are too neatly and elaborately phrased to have been in savage earnest, or even with devotion to truth instead of forensic and literary effect. The agility, the pose, and the triumphant smile of an acrobat are suggested oftener than the stress of real combat. In many of the essays, or in the special points made, there is the appearance of getting up a case under the guise of seriousness, as in a moot court, and then resorting to all the ingenuities of debate on such an occasion. That he indulged in caricature is abundantly evident, and he was a man of too much intelligence not to know when he used that common weapon against the Bible and its doctrines, as well as when he raised false or irrelevant issues that bear the semblance of pertinence. Not infrequently his humor is spiced by a quasi frankness, as in his address on the Physical Basis of Life (protoplasm) where he informs his hearers that he has led them into a materialistic slough—which he did, or tried to do, by the clear necessity of knowledge, as Dr. J. H. Sterling says, while he only showed a way out by the obscure necessity of ignorance, namely, as to what matter really is

—a result that the speaker must have enjoyed hugely at the expense of his audience and the general public.

Humor and pure sensationalism were combined in Huxley with a good deal of the gladiatorial. His broad, square jaw gave a physical basis for this, along with his close-set lips, heavy nose, and beetling brows. He was a born fighter, but a sufficiently good-natured one, thanks to his vein of humor, his pleasure in rhetoric, and still more to his real indifference in regard to everything men esteem sacred. He was eager for a fray, especially when a bishop, a duke, or an eminent man like Gladstone, assumed to touch science and laid himself open to criticism, just or unjust; on such occasions he felt himself to be science embodied, unchained, on guard, rampant, or at least latrant. His pugnacity, however, was probably discreet, for there were many Bible defenders, of eminence, whom he did not attack. Gladstone was an object of much party hatred, though not of Huxley's, and there must have been a multitude to welcome the attack, besides those who welcome assaults on the book of Genesis.

Huxley seems to have kept clear of martyrdom; he had enough applauders. Indeed, he was far from having the intense earnestness and stern stuff of a reformer. He

was not an apostle of anything, except of one misapplied summons—"prove it" (and he did not care to have it proved), and one phase of indifference to which he gave the name of agnosticism. All talk about his candor and love of truth is the worship of a clique, and is disproved by his writings. In short, though a bugbear in his day and still, he was neither a malignant and mighty prince of darkness, on the one hand, nor on the other much of a demigod to be worshiped.

THE AUTOMATISM LECTURE.

To understand his methods, one needs to go back to his first two famous utterances, one of which is spoken of above. On both occasions it must have excited his inward laughter to be posed as an outspoken hero, reckless of position and popularity. He had a sufficient public in his favor, ready to accept anything, nine years after the Darwinian discussion began, when he discoursed on protoplasm, and six years later, in Belfast, 1874, when he proclaimed animal automatism, leaving that well-treated but half-treated subject in a very sensational shape as to its application to man. He was not a man to speak at random; he knew the precise force or the ambiguity of a word; yet in the latter of the two addresses referred to he confounds

volition with emotion,* and by implication with will in any sense; and he denies causality to volition, "to make clear" which statement he winks out of sight the fact that his decerebrumized frog (or its ancestors) had acquired the reflex actions when not mutilated, having then whatever animal consciousness and mind a batrachian may possess. The conclusion of the address undoubtedly gives its animus, namely, to electrify the British public as Tyn-dall had done at the same Belfast meeting the Wednesday previous. The fun begins, as we say, when Huxley adds: "I should not wonder if you were told that my intention in bringing this subject before you is to lead you to apply the doctrine I have stated to man as well as to brutes." Apparently he disclaims such intention; he is sarcastic toward those who would impute it, but in the next paragraph he says he does so apply it fully and entire, and then, without explanation, denies the logical fatalistic consequences and shelters himself behind some of his former writings, unnamed and unexplained, and behind certain great names, including John Calvin and Jonathan Edwards—a climax of drollery, in view of his

* Possibly identifying both with physical feeling, from a protozoan upward, after the manner of the Bains of mental philosophy, to whom everything is everything and thus nothing.

subject and argument. Although the animal automatism is all well enough, except as unqualified in some respects, the address must be set down as an elaborate jest at the expense of good John Bull, when viewed as to its time, occasion and other tilts and tourneys of the eminent speaker.

SENSATIONAL SCIENCE.

The humorists, if not the sedate radicals and sedate conservatives, recognized the situation, and we cannot suppose that a man well endowed with the element of humor brought about the situation without a lively sense of this element as involved in it. The English periodical *Time*, for example, had portraits of Huxley and Tyndall, with halos of electric or phosphorescent light around their heads, accompanying a long poem on "Sensational Science," in which are the following stanzas:

" For science now our girls and boys
 Their love for thee recant, O mime!
The clown is shunned for higher joys,
 And Tyndall beats the pantomime.

" Our laughing girls give up their play,
 All bitten by the mania
To hear what Huxley has to say
 On Patagonian crania.

“ On Life and Death and Hell (O fie!)
These famous men enlighten us;
They wing their flight so very high
They positively frighten us.

“ On all our cherished creeds they fall,
Without the least apology,
And hurl the bowl that scatters all
The ninepins of theology.”

While sensational enough under the circumstances—departing wholly (as the *New York Tribune* correspondent wrote in reporting it) from the forms laid down by custom for a discourse on such an occasion—Tyndall’s address at Belfast has less of the aspect of a mischief-loving effort to “hurl the bowl that scatters all,” although he, too, leaves us in a comical dilemma, namely, how he could reconcile his professed materialism with what he calls “the immovable basis of the religious sentiment,” and how he could disown a materialistic atheism, as he does in his preface to the address as published, except perhaps as one who agnostically relegates to mystery the theological bearings of the subject. But, Huxley’s address at Belfast is a serio-comic performance, the plot, founded on good animal psycho-physiology, taking a short and sharp turn at the end in a dilemma plainly intended to be utterly confounding—to “positively frighten us,” as

expressed in the humorous poem above quoted. And, what is remarkable, down to this year, 1895, in England there are some defenders of spiritual philosophy and faith who seem to have been continuously awed by his high scientific standing, and perhaps social prestige in consequence of it—hardly by the repeated emissions of his theatrical thunder and lycopodium lightning. In this country, few seem to have been alarmed, and still fewer disturbed by his imitators in their occasional addresses before our scientific associations. Their deliverances scarcely awakened an echo. In this large and democratic land there is and can be no Royal Society nor French Institute, nor anything equivalent to it; much less any president or prominent member of a learned body, who, by virtue of his position or the letters attached to his name, can straddle a continent, and by his bold utterances positively frighten us. Men are taken for what they are worth, or what their teaching is worth; and we are not easily frightened nor too deferential.

THE METHOD OF ZADIG.

This brings us to the collection of Huxley's papers entitled *Science and Hebrew Tradition*, as illustrative not only of his fallacies but also of his facetiousness, and especially its presence

under the guise of seriousness for the most part. The first essay, *On the Method of Zadig*, is in a style of light and airy humor in its first half. Throughout, it well enforces the scientific method, while under the words "magi" and "magian cosmogony" it slyly hits as quite unscientific and grotesque the persons and the venerable record that are assumed to be at variance somehow with every form of evolution, although, so late as the date of the essay, 1880, its main point—the retrospective prophecies of the biologist in constructing lines of descent of animal species—could meet with no general and strenuous protest from any quarter, except in respect to the very supposititious nature of the pedigrees constructed, and more particularly the long kangaroo jumps from one type to another in the past succession of life.

FIGHTING WINDMILLS.

One thing is noticeable especially—the conjuring up of old objections and opinions, as if these were part of a warfare that science has now to wage; this is one of Huxley's frequent pleasantries, though not peculiar to him. For example, in this essay and elsewhere he brings up the old notion of fossils as *lusus naturæ*, in other papers the days of Genesis as so-called literal days, etc., and would in effect bring to-

gether the opinions of several centuries as the one herd of sheep, or one windmill, with which he does Quixotic battle. There is not enough in the present tolerant and docile attitude of a large majority of educated religious men to make a telling dramatic situation. "New chapters in the warfare of science"—always excluding the history of fierce combats of scientific men and theories with themselves—must be dredged up from the past. And so far as Biblical people accommodate their ideas and their interpretations of the Bible to the progress of science, this, too, is made a reproach—a vice of "reconcilers"—although accommodated interpretations of the book of Nature are never made a jest at the expense of progressive science—although, in fact, the hospitality of the Bible itself to advances of knowledge, so far, is one of the proofs of the Divine superintendence of this most wonderful of books, setting it apart in singular contrast with ancient writings of similar scope—yes, in contrast with the outgrown and fantastic science of recent ages.

MISREPRESENTATION OF THE DOCTRINE OF CREATION.

In the paper on Progress in Paleontology, we have the diverting legerdemain that com-

pletely hides all there is in the word "creative" under the old idea of innumerable species originated wholly independently of each other, instead of leaving the word properly open to the larger sense of a directing and advancing by divine energy and effluence, as a part of the creative work, so that new elements were added, such as life, sensation, rationality—open, also, to the still larger sense that the entire creation was and is evolved by the Creative Power, of whom and by whom are all things, and in whom all things consist. Further the word "creative" is cunningly hitched to the word "miraculous." Much the same sleight-of-hand divertisement is offered to us in the Huxley-Sully article on Evolution in the *Encyclopædia Britannica*, where the whole subject of creation is summarily dismissed by a similar assumption under the words "special creations," and by further expressed or implied assumptions, namely, that evolution is a necessary process (that is, with nothing but Necessity as its God), that the natural cannot have its ground in the supernatural, that creation is an arbitrary volitional process (*adroit anthropomorphic words*), that it is but an act and only direct, and that secondary causes limit the sphere of direct divine activity, and so far eliminate God, the reader being left to infer that he is quite eliminated. Emanation, though acknowl-

edged to be a theory of creation, is, in the caption of the section, made quite distinct from creation ; space is given to it, as later to the spiritual, which is presented only in a pantheistic form. Altogether, it is a sly jugglery to depreciate and dismiss the thought of creation and Creator by confining it to species or to certain flats, assumed to date a few thousand years ago, and associated with an antiquated view of the first chapter of Genesis, which view is an essential part of the stock in trade of the decriers of that book.

THE MILTON LECTURE.

All this comes out at more length in the next succeeding essay, which is the Milton Lecture given in New York in 1876. The old hypothesis, as if it were the best orthodox present one, is thus stated: "that the present order of things, at some no very remote time, had a sudden origin, and that the world, such as it now is, had chaos for its phenomenal antecedent"—three of the clauses a threefold misstatement of the better Biblical interpretation in the last half-century by men of science as well as many theologians. The time is indefinitely long, except, as geology itself teaches, the first appearance of man was comparatively

recent ; the origin as sudden was only such on the "literal day" view, long since given up, and in fact not entertained by some very ancient interpreters, patristic and Jewish ; and nobody ever understood that the present order came straight out of chaos, and (no matter who says it is) chaos is not in the book of Genesis any more than it is in the first stage of things on the nebular theory. But no hint even is given that the misstatements are countenanced by old misapprehensions only, a half-century behind the times. In the next sentence the grand joke of the lecture takes form—"That is the doctrine which you will find stated most fully and clearly in the immortal poem by John Milton ;" and the lecturer, undoubtedly maintaining a sober face, extracts the passage from "Paradise Lost" about the first lion pawing to get free his hinder parts from the ground, and the tiger as the mole rising, etc. Probably there was a titter among numbers of the audience. But, not satisfied with the doctrine as "stated," and "most fully and clearly" in the poetic poetry, the lecturer himself states the Miltonic hypothesis in his own prose, which is a purposed paraphrase of the first chapter of the book of Genesis, carefully conformed to the now obsolete or very obsolescent understanding of it, thus making the

Miltonic embroideries identical with a Scripture narrative of the most prosaic and rational simplicity.

Later in the lecture, with a characteristic assumption of frankness that is the cream of his drollery, he pretends to explain why he called it Milton's hypothesis instead of the Biblical doctrine. The first reason is, that the question about creation is a philosophical problem, not historical—as if the better interpretation of Genesis goes beyond presumable fact, and as if Evolution, the subject of the lecture, is not (the Huxley-Sully article in the *Britannica* shows it is) quite as philosophical a subject as historical. The second reason is manifestly ironical—that he does “not for one moment venture to say that it can properly be called the Biblical doctrine,” because it is not “my business, and does not lie within my competency to say what the Hebrew text does, and what it does not signify,” though in this book he repeatedly indulges in Scripture exegesis; and, further, because he would “be met by the authority of many eminent scholars, to say nothing of men of science, who, at various times, have absolutely denied that any such doctrine is to be found in Genesis,” an incidental admission that there are the weightiest reasons for considering fairly the newer and better interpretations in place of the outgrown

ones, but an admission made only to give point to a sarcasm about diverse interpretations and "contradictions of authority upon which he is incompetent to form any judgment." In this volume elsewhere, he abundantly gives his judgment in these matters, whether seriously or not, and also in the matter of his third reason—the authenticity of Genesis, of which he here says: "I give no judgment—it would be an impertinence upon my part to volunteer even a suggestion upon such a subject." Altogether his reasons must have been taken by himself and many others as very humorous indeed, especially in view of his own paraphrase of Genesis, which he calls the Miltonic view.

THE CREATION OF VEGETAL LIFE.

He goes on to test the Miltonic hypothesis, by which he means the Biblical record. The plants, appearing on the third day, must have been like the existing ones, such as trees and shrubs, he says, or else the existing ones must have arisen by a process of evolution. Let it go at that. But, an objection is elsewhere made by him to the place and face of the text about grass, seed, and fruit. He must have known the reasonable solution of this, namely, that vegetation is very naturally spoken of by the sacred writer once for all, the object plainly

being to refer every kind to Divine ordering, with no thought of the successive appearances of each. This is enough to say, but our present knowledge can offer a further defense. Vegetation is a simple melody with many variations. Mode of reproduction is the thing here in question. All modes are essentially one—the separation of a portion of an organism to lead an individual life; and botanists tell us that even in the lowest plants, the protophytes, “sexual distinctions are possible, and may have hitherto been overlooked or misunderstood.” As a fact, the divisions of plants found furthest back in geologic time are as truly sexual as the highest plants, and a name of one of these divisions, carposporeæ, signifies the fruit-spore group, that is, with fructification having a fruit-like envelope, an odd coincidence of name and fact, but not given here as a scholium on Genesis. In botany fruit is a term applied to the lowest as well as the highest fructification; and certainly the unbotanical writer of Genesis must naturally have supposed that all vegetal reproduction is by seed, if he gave any thought to the matter. Indeed, the kind of evolution that finds Shakespeare in the original star-dust, reason in crustacea, and religion in a dog, should “have no great difficulty” in finding fruit and trees in even the Archæan graphite. Enough, however, that the sacred writer spoke

of vegetation as he saw and knew it, with not the slightest reference to botanical classification or to succession of groups, even as afterward he speaks of flying creatures and of monsters with no reference whatever to the classes and orders that belong to zoölogical classification.

This particular subject is here mentioned at some length, because considerations like those above mentioned could not have been unfamiliar to Huxley. It was part of his game to ignore them. As to vegetation appearing on the third day, a whole æon before animals, nobody ever can deny it, the rocks before the Proterozoic covering an immensity of time and being so metamorphosed that the vestiges of life are obliterated, with a single questioned exception so far. In general, while vegetable and animal have much in common and are near each other in their lowest forms, it is an obvious fact that animal life as a whole depends on the vegetal, and that the latter as a whole is of lower grade, so that it might well have preceded the former, even for a long period.

THE CREATION OF ANIMAL LIFE.

Still keeping up his Milton masquerade, the lecturer, or rather prestidigitator, amuses himself and mystifies his audience by pulling "birds" out of his hat. If he took any care to

look up the subject he must have known that the Hebrew word, too narrowly translated fowl, simply means flier, and that it would apply as well to his carboniferous insects as anything else, if there were occasion to bring them at all into the argument, as he does laboriously in order to show that there were terrestrial animals before "birds" (fliers), and thus have it appear that these and aquatic animals, with nothing else, make the fifth period of Genesis a blunder. Of course, true birds can be admitted here under the word flier, for Genesis is here giving animal life down to an age of mammals, and geology finds birds before its Age of Mammals. He goes on to fish great whales out of his hat, taking advantage of the old translation of a word that simply means monster, and that now, in the light of geology, would well apply to the great Mesozoic amphibia and reptiles which were contemporary with reptilian birds and true birds. It was Huxley himself who coined the word Sauropsida to name his grouping together of reptiles and birds—a grouping that has a singular coincidence with the monsters and fliers of Genesis 1: 21.

He would have us shocked to think that "the whole series of fossiliferous stratified rocks must be referred to the last two days" of the narrative. But he well knew that,

although Genesis may now be interpreted in the light of geology, the jejune attempt to identify the six or more ages of geology with the periods of Genesis had long since been given up. The entire muddle he would make of it is clarified at once by making the fifth day, with no special reference to a geological table of strata, extend to such time as mammals become a conspicuous feature of terrestrial life, no matter where the first small ancestor of mammals appeared in the Mesozoic. His little dilemma here again, as in the case of plants, that present species must have been created at first or else new ones afterward evolved, is not at all in the text, which has nothing to say on the subject. Nor does the text imply, as he would have it, that there were "breaks in the uniformity of nature's operations"—something "other than a clear and orderly sequence." His serio-comic travesty ending here, he proceeds in the next two lectures to give a good statement of the palæontological claims of evolution.

GLADSTONE AND GENESIS.

The next paper, dated 1885, is the first one in which he goes for Gladstone. It was rare sport to sight this leviathan of the deep, spouting about science and Scripture; and Huxley

felt that Job's challenge was urgent: "Canst thou draw out leviathan with a hook? Canst thou fill his skin with barbed irons?" Of course, in view of what has been said in the last paragraphs, Gladstone's language was not felicitous in summing up the fifth day's appearances as the "water-population" and "air-population," and the sixth's as the "land-population of animals" and man. Huxley gets in his little harpoons by thrusting in his palæozoic insects as air- and land-population between two water-populations, namely, the aquatic invertebrates and the vertebrate fish, his air-population being an insect's wing from the Middle Silurian and scorpions from the Upper Silurian, both of which facts, important enough in geology, are set forth as if having much to do with Gladstone and Genesis, whereas it is not a question of inconspicuous first appearances. Then, as to the later life, Huxley makes palæozoic Amphibia and the possible Reptilia of that time, the land-population coming next, though why more terrestrial than aquatic does not appear; and on the top of all, mesozoic birds and pterodactyls and Tertiary bats. This order of "first appearances" is true enough, and it is well put if the object is to set an insect buzzing about and stinging Gladstone's form of statement, and in general to rattle the words water-population, air-popula-

tion, land-population, vertebrate, invertebrate, through eight or ten pages, as if there were, in the argument as stated, a relevancy to the original Hebrew record.

THE CREATION OF MAMMALS.

What is especially noteworthy is the hocus-pocus by which Huxley again gets marine mammals—whales and porpoises—into the Hebrew for monsters, sufficiently referable here to other things, whether discriminated or not by the author of Genesis; also, now includes even bats in the flying things of that early period; and, further, makes the creeping things of verses 25 and 26 comprehend all kinds of terrestrial animals except “cattle” and “beasts,” whereas, according to a good Hebraist, the word *reh-mes* is “derived from a verb signifying to move or tread, and by no means limited in its application to insects and reptiles,” the verb form being variously used in the Scriptures, for example, in the sense of stealthy movement, as in Ps. 104, “the beasts of the forest do creep forth,” so that, the noun being used here in Genesis as supplementary to cattle and beasts, it may suitably refer to the many and various wild mammals other than the larger wild beasts proper, particularly the small and unobtrusive that are timid or stealthy

by reason of defenselessness. In succeeding pages of the essay now under comment the author maintains that flying things must have been preceded by wingless, and that man may have preceded the horse, both which propositions may be granted.

DOING HIS WORK THOROUGHLY.

Then the author proceeds "to do one's work thoroughly while one is about it;" he essays to rout all defenders of Genesis, not Gladstone alone, by a grand final charge—that the conception underlying the whole of Genesis is that animal species, instead of continuously originating and dying out, originated during and only during three distinct and successive periods of time. Not a bit of it. His statement has no force on the long-period interpretation. And he knew well enough that Genesis has nothing to say that touches the subject of successive or contemporaneous species one way or the other—much less that on the period interpretation it implies that all of a kind appeared together at three or any number of junctures. It only gives, in its own general terms, the general introduction and prevalence conspicuously of swarming sea creatures, flying things, monsters, and afterwards cattle and beasts, as

characterizing two periods, precisely as geology in its own way characterizes the palæozoic as the age of invertebrates, the Devonian as the age of fishes, and the Cenozoic as the age of mammals, omitting, as geology does, from this characterization the first more or less obscure appearances. If he means also that the orthodox view would include present species as originating in three great periods, or any number, many æons ago, it might just as well be claimed, or urged as an objection, that "every living thing that moveth" and "every living creature after its kind" means individuals that are now actually living on the earth.

DOING JUSTLY AND LOVING MERCY.

The essay closes piously, with high commendations of Micah's conception of religion—"What doth the Lord require of thee, but to do justly, and to love mercy, and to walk humbly with thy God"—a refreshing quotation under the circumstances, made by an agnostic, acknowledging that there is a God, and suggesting that one should treat "justly" a record that may have difficulties or ancient forms of expression, but certainly is regarded by many of the wisest men, dead or living, as Divine in its singular consistency with all truth, old or new, and as such should be "humbly"

and continuously studied or held in reverent suspense, not peremptorily and contemptuously dismissed. Somehow, even they who discard it can never let it alone.

SECOND REPLY TO GLADSTONE.

Accordingly, in 1886, in reply to Gladstone's reply, Huxley returns to the subject. His harpoons having failed to dispatch the grand old man (as Gladstone is termed in this country), the sport will surely be renewed with improved bomb-lances. But here again we have birds picked out of the hat of an indefinite Hebrew word mistranslated fowl; and monster is again made in the text to necessarily include marine mammals; and there is a triumphant reference to Leviticus 11:29-31 to prove that "creeping things" must include terrestrial reptiles, though in his note at the end of the essay Huxley acknowledges that the Hebrew word *sheh-retz*, not *reh-mes*, is used in the passage in Leviticus, and that it has a wider sense that may include reptiles of the water, the earth, or the land; and he ignores the fact that it is the very word *sheh-retz* that occurs in Genesis 1:20-21, where it refers to aquatic creatures, so that, interpreted by close context, the *reh-mes* of Genesis 1:24-26 is not the *sheh-retz* of Leviticus—a difficulty that he seeks to avoid

by saying it is not a question of words but of things!—not a question of Hebrew text! This lance wholly misses its mark; and its failure is confirmed by the verb forms that explain the nouns; these forms would make *sheh-retz* signify prolific creatures, and *reh-mes* suitably apply to those that have been pointed out in a previous paragraph of this review. In the same victorious style, Huxley refers to Leviticus 11: 13–19, to show that the flying things (mistranslated fowl) of the fifth day must include bats, which are mammals. But the flying things of Genesis 1 were before the scriptural and geological age of mammals, while in Leviticus we have flying things of kinds now extant, and the argument falls to the ground. It looks very much like a bit of dishonest tactics in controversy.

In the rest of this second reply to Gladstone there is nothing of any importance bearing on the real merits of any question between revelation and science. It is in the usual style of Huxley's controversial and other magazine writings—a sportive or half-sportive attitudinizing and fencing, and a smilingly self-complacent glassing himself in his own rhetoric and especially in his irony, with much studied circumlocution and more or less profound bowing in seemingly mock deference to the man or thing he is criticising, all which must have

afforded himself no little recreation, if not positive amusement; and it was kept up to the end of life, characterizing his final effort in the *Nineteenth Century*, March, 1895, the whole gist of the article being an attempt to discriminate agnosticism from positivism and naturalism, which might have been done in six lines had not Arthur Balfour's book ("The Foundations of Belief") offered a distinguished occasion for Huxley to exhibit himself at large, as in the case of his tilts at the three bishops in 1886, Gladstone and the Duke of Argyll in 1887, the Principal of King's College in 1889 etc.

PETTIFOGGING FOR OR AGAINST GENESIS.

In respect to Gladstone's second and modified presentation of Genesis, it is certainly open to criticism, and this only concerns himself and his critic. However it may be in this case, it is to be regretted that in many instances a scientific defense of Genesis is not left to those who have made a fairly thorough and practical study of the sciences involved, instead of those persons who have merely read up science to some extent for the occasion. Here, for example, is a recent book by a brilliant, probably young, American clergyman, whose zeal for the Bible leads him into extravagances ;

thus, finding in the original Hebrew word signifying expanse, and mistranslated "firmament," one of the several meanings or a root-meaning to be the spreading out or beating as a metal by hammering, he discovers in the word all the hammering thunder of the stormy times when the present oceans were evaporated as fast as the suspended water fell on the hissing, half-cooled globe, to fall again ceaselessly in hot rain, with continuous lightning; and he takes Huxley's table of geological formations and first appearances of life (in the first reply to Gladstone) and alongside of it he tabulates the *clauses* of Gen. 1: 20-21, showing a coincidence all the way from Cambrian to Eocene—as if the author of Genesis or as if Divine inspiration can be supposed to have arranged the order of the clauses in those two verses so as to agree with the order of pretty much all the ages and periods of the geologic series, or indeed any of them. There is no assurance of a comprehensive taking in of the facts and bearings of a science without a systematic continued study of it. But the misuse of scrappy science is not confined to any class of persons or subjects; it appears everywhere. It abounds, for example, in the books of an able writer and lawyer, Ignatius Donnelly. In his "Ragnarok," to take one instance, he finds confirmation of his cometary origin of the geologic drift in a

quotation from Geike, describing the confused and burnt appearance of certain drift in Scotland (simply colored by anhydrous iron sesquioxide, like red soils elsewhere), and he overlooks or suppresses the fact that Geike traces this to certain rock strata, thus excluding the wild idea that it is the *débris* of a comet. This is pettifogging, and there is too much of it for and against the Scriptures—by even men of science sometimes. Indeed, Huxley's Bible discussions are pettifogging all through.

HUXLEY'S THEORY OF A THEORY IN GENESIS.

The long appendix to "Mr. Gladstone and Genesis," on "the proper sense of the Mosaic narrative," would seem on the face of it to be a sincere statement of Huxley's understanding of the narrative, or rather of the conceptions of the author of Genesis, underlying the record, for that is what the note amounts to. As an idle divining of preconceptions, made to conform to the most infantile ancient ideas and superstitions in regard to nature, the note is of little importance, even if it be quite serious, of which we can never be sure. It is at most simply Huxley's theory that the author had a theory, and his theory of the theory. He thinks that the word "day" is used in the "popular sense," that is, twenty-four hours.

Why it should be regarded as the one and only popular sense, or natural sense, or the sense required by the author's theory, if he had one, does not appear. Every one knows that day is used in various senses here in Genesis; it is applied first to light itself ("God called the light day") before the diurnal periods that began when the sun appeared; and in chapter second the whole six days are called a day; and throughout the Bible and in our common speech it is familiarly, popularly, naturally used for any period of any length.

It is no new dodge to get around a modern difficulty, for, as already remarked, it was interpreted as a long period or somehow figurative by many in ancient times, among them Josephus, Philo, Origen, and St. Augustine. The only apparent difficulty is the words "the evening and the morning were the first day," and so on. Literally, this gives *no* sense except to make night the day. We are at liberty, therefore, to make it mean the conjoined ending and beginning of periods, the dividing of one period from another. But we need not leave it thus, if the original Hebrew be taken into account, as it should be above all; without this, discussion is futile. And, going no further back for authority, it happens well that we have that of an excellent Hebraist, George Bush, at the very time—about fifty-six years

ago—when John Pye Smith was the great “reconciler” in his notion that all geological ages could find abundant room in the first verse of Genesis, “in the beginning,” and thus the days could be common days, a provisional opinion held before and immediately after him by many men of science and many exegetes; in fact, it was the favorite one just then. Thus, there was at that time no pressure to force exegesis in favor of long periods, and the comments of Bush may be regarded as free and unbiased, founded on the best scholarship of himself and others. In his “Notes on Genesis” he says that nothing is more common in Hebrew than to find the singular used in a collective sense equivalent to the plural; and thus the “evening and the morning” can be understood as a series. Further, he shows that in the expression the “first day,” the word translated “first” means one, and the same Hebrew word (*ahad*) is repeatedly used in the sense of peculiar, certain, special, unique, different from other; and the second day, third, etc., are to be interpreted by the first or one day, the word for day (*yom*) being in various passages of the Bible employed indefinitely for period. And the use of the word days in the fourth commandment does not necessarily disturb this rendering. All this is fighting over an old battle, but one that is still new to many, and

is kept up by the jesters at Genesis, particularly by Huxley.

WAS THE HEBREW WRITER A HEBREW?

The note goes on to say that we must put ourselves into the position of a Phoenician or Chaldean philosopher to grasp the meaning of the Hebrew writer—an amusing begging of the question, which is exactly whether that writer, very possibly using traditions and older documents * that might have come down from the first revelations to man, with or without accre-

* The negative critics, who would pitchfork the most of the Pentateuch at one throw to a date ten or twelve centuries later, of course talk of much of it as later than the Babylonian exile, and would like to get its cosmogony from the Babylonian. But the oldest record found in cuneiform tablets, the Akkadian, recently discovered, amounts to nothing as a source of Genesis 1 or 2. See translation by Theo. G. Pinches in the *Academy* (London), Nov. 29, 1890. The previously known Babylonian account of the creation, found and published by George Smith, has hardly more than a single point of resemblance. The Babylonian cosmogony as given by Berossus has some striking points of agreement, but in many respects extreme disagreement. The Bible cosmogony is either the earliest and pure revelation to man or the common tradition reconstructed and purified and sublimed by Divine inspiration. But, they are still Babylonianizing it, as witness a recent book by a Berlin professor,

tions and contortions of superstition—whether that Hebrew writer was so influenced and enlightened by the Spirit of God as to construct the narrative in a way that of course did not give him “our present knowledge of nature,” but none the less resulted in a record, on the most risky of subjects, long prior to that knowledge and yet wonderfully consistent with its immense advances, when the record is examined by eminent Christian men of science as well as by theologians—a fact without parallel in any cosmogony or any ancient conception of the universe, and a record without parallel in its rational and sublime simplicity, acknowledged by all men. Thus, in view of his begging of the entire question, no further space need be given to Huxley’s theory of the Hebrew writer’s theory, involving the Common Version mistranslation of *expanse* by the word *firmament*, and a supposition that light and darkness were conceived as entities, that water and earth were regarded as generative, that man corporeal is represented as made in the corporeal likeness of God, whereas the likeness there mentioned is in connection with dominion over nature, and so refers to man’s highest endowments.

THE SECOND CHAPTER OF GENESIS.

The note closes with a paragraph about the second chapter of Genesis, regarded as containing a different account of creation, inconsistent with the first. This is not Huxley's discovery. It is a nice little tradition of modern Biblicists. But the account can be construed as a brief recapitulation, and becomes clear if the word rendered "before" in the second verse be translated "not yet," as it may be, and "but" in the sixth verse be rendered "nor," as the Hebrew particle is often properly construed in the Scriptures when it follows a negative. The sense would then be : in the day that the Lord God made the earth and the heavens ; not yet—down to that time or stage of creation—was there plant, nor rain, nor even mist. Thus, with this reference of the beginning to God, concordant with the first chapter, the writer, without further recapitulation, refers to Him the consummation in man's creation ; it was God from first to last, now called the Lord God (Jehovah Elohim) to include the special name Jehovah as that of Him who presided over the ensuing history of man.*

* Judged by its derivation, "the name Jehovah signifies that the being of God has a progressive manifestation and development. It points to God's relations to man in history." "In Psalm xix. God is called *el*

Here, He is said to have formed man of the dust of the ground, the mention of man's material nature being a fit preface to his material abode and work in the garden, and to his later life of labor until his return to the dust ("for dust thou art"), in contrast with the first chapter, which speaks of man's diviner nature, his likeness to God, in connection with his lordship over the world. In the nineteenth verse there is no necessary implication that beasts were made after man; the writer or compiler of the record certainly could not have been so utterly blind to the first chapter; it amounts to this, that in the

when his revelation in nature is referred to, but Jehovah when the reference is to his revelation in the Law." Schaff-Herzog, *Encyc. of Rel. Knowl.* "Both names, he [Havernick] admirably proves, are used by Moses discriminately, in strict conformity with the theological idea he wished to express in the immediate context; and, pursuing the Pentateuch nearly line by line, it is astonishing to see that Moses never uses any of the names at mere random or arbitrarily. Elohim is the abstract expression for absolute Deity. . . . Elohim is the Creator, Jehovah the Redeemer." Kitto, *Cyc. of Bib. Lit.*, 1st ed. But we have grown so wise that we find the Pentateuch made up of many original documents, of which we know nothing, and particularly that it is not Mosaic, but a mosaic of bits of fragments from a Jehovistic and an Elohist writer, cleverly put together, to the number of thirty or forty in a chapter, according to the fragmentary hypothesis that reduced itself to absurdity.

naming of creatures by Adam, the pervading truth that everything was formed by God comes in as a recapitulation without reference to order of time. This view of the second chapter may or may not agree closely with that of commentators; it is presented as an obvious one, after a fair understanding of the two Hebrew particles that in our English version make a puzzle of the fifth and sixth verses. Something like it ought to be obvious to any objector who is not simply amusing himself and the public, or who is not a purblind anatomist of text as dead letter instead of living truth.

“THE MANUFACTURE OF EVE.”

Next follows what Huxley terms jocosely the manufacture of Eve. This, as the text stands, is the first real stumbling-block in the book of Genesis. It is certainly out of harmony with all we know of the Divine methods, if taken otherwise than as a vision given to Adam, and explained by himself as teaching the oneness of husband and wife. Revelation was at first and often by visions or dreams. The learned and cautious commentator, Bush, here selected because he was a Princeton Presbyterian, and at the time a professor in a very orthodox university, wrote in 1838:

“As this deep sleep is said to have been caused in a supernatural way, the Septuagint version is probably correct in rendering it ecstasy or trance, such as usually fell upon prophets and others when favored with visions and revelations from God. Nor do we see any objection to Lightfoot’s supposition, that such was the nature of Adam’s sleep at this time, that the whole scene of Eve’s creation was presented to his imagination as a divinely inspired dream.” The place in Dr. John Lightfoot’s works is not cited, but in notes on this part of Genesis he evidently regards the dream as corresponding to an outward transaction. But, one may well ask, who reported the matter except Adam, and how otherwise than as something visioned in trance or sleep; and by him as childlike, in the childhood of the world, possibly not distinguished from objective reality, and as such coming down in tradition?

Such an explanation (independently suggested by the writer of this review in a volume, “The Spirit of Beauty,” 1888, and not censured, so far as the author is aware) is favored by the creation of *adam*, the generic man, “male and female” in the first chapter, the word *adam* being also used collectively in later chapters, as in Gen. 5 : 2 “he called their name adam,” and in Gen. 9 : 6, “whoso sheddeth man’s [adam’s] blood,” etc. It is countenanced, too, by the

implied existence of other families of the human race, of course male and female, in the fourth chapter, in the time of the *individual* Adam and his youthful sons, he having been chosen from the race as a representative for special purposes, as many reasonably infer. The only difficulty, on the above view, is in the words preceding the trance—"there was not found a help meet for him;" and the difficulty can stand unexplained, if any one chooses to have it so, like many other difficulties in records, human or divine, although in this case the words might be quickly reconciled by simply emphasizing two of them: "there was not *found* a help *meet* for him," that is, no one in the existing race was yet found or selected as a fit companion for one chosen to be the head of a new dispensation, until Eve was found.

In all this the supernatural is not at issue, for that is in revelation by trance. The supernatural, moreover, is all-embracing, including God, and man so far as he is *super*, above, *natura*, nature, in his spiritual, free, Godlike endowments, and it takes in redemption, regeneration, immortality. A believer in the Bible, and even an interpreter of Nature in the light of Divine Reason, must stand firmly, squarely, on the supernatural, and of course on the miraculous as one of its many possible manifestations, but without interjecting this where

one can interpret more in accordance with Divine methods and with related passages of Scripture, as in the foregoing paragraph.

THE TEMPTATION IN THE GARDEN.

The third chapter, to which Huxley refers as the "snake talking," is too large a subject to be dismissed in a jest; many men of learning and ability in all ages have found it worthy of serious study, and it is too large to be considered here. Enough that it has been considered strictly historical by many, Satan assuming the form of a serpent and speaking, and so on; by others, including ancient Jews and Christian fathers, it is held to be allegorical, or at least to some extent figurative, and they find this view favored by what seems to be the symbolism of a tree of the knowledge of good and evil and a tree of eternal life. As to the main point, a test of obedience given and that of a simple sort, there is nothing in this that is incredible as occurring in the childhood of the human race. Incidentally and in general it may be remarked here that the New Testament, while it adopts the Old Testament, does not include in its purpose and scope an inquiry into the literal truth of all particulars in the Old Testament records as to persons, events, and scenes; it uses these as they stand recorded and as

illustrative, even adding new touches and tints in order to enforce Christian truth, just as it quotes Old Testament language freely, often not verbatim.

THE DELUGE.

The sixth and seventh papers in this volume of Huxley's writings are "The Lights of the Church and the Light of Science" and "Hasisadra's Adventure," both dealing with the Deluge. He grants that there is nothing in a great destruction by flood and the saving of a few in an ark that is incredible, and he shows clearly that the universality of the Deluge has been given up by "The Lights of the Church." Very naturally giving preference to the pagan version of the event found in the Nineveh tablets, he pronounces all versions mythical. But the almost universal prevalence of the tradition in one form or another should make it highly probable that a great catastrophe did happen to the human race in its ancient seat somewhere. He makes a long and elaborate argument to prove that the Deluge, assumed to have been in the valley of Mesopotamia, could not have occurred to the height described, nor anyhow without sweeping away an ark to destruction southward in the Persian Gulf—his reasons being the great height of the

mountains and plateaus adjacent and the slope of the valley to the sea, all which is good reasoning against that locality, not against the event itself.

THE QUESTION OF THE DELUGE LOCALITY.

It is much to be regretted that the Flood has been commonly spoken of as in or including that locality, probably because the "mountains of Ararat" of Scripture are assumed to be the same as the twin peak Ararat north of Mesopotamia, whereas the phrase applies to any part of the plateau region of Armenia, and may have been used for another region, as in the case of many repeated geographical names, especially those that signify some feature found in more places than one. Irrespective of name, the Armenian locality is neutralized by another tradition that the resting-place of the ark and the cradle of mankind was a mountain on the slope of which was built the ancient city Ecbatana (the southern of the two Ecbatanas), now Hamadan. This is approximately east of Babylonia and directly east of Southern Mesopotamia, as the narrative in Gen. 11:2 would require. The chief pass between the ancient Media Magna and Mesopotamia is near this mountain; and, following an eastern branch of the Tigris, the descendants

of Noah would have reached Mesopotamia. Moreover, from the mountain eastward is a great valley ending in the vast salt-marsh south of the Caspian Sea, the Great Salt Desert, which Sir Oliver St. John reported as below or not much above the level of the sea; and a geologist reports "recent or sub-recent" unconsolidated deposits as covering plains and even the hills to a considerable height in Persia, speaking of this as the most striking feature of the country. In all this, the conditions and general tradition and Scripture favor some part of the old Iran, now Persia, as the original seat of mankind, and hence the scene of the Deluge. Further, the earthquakes and volcanoes of the region favor a possible great ancient convulsion.

Granting that the garden planted in Eden was in Armenia (see Dr. S. C. Bartlett's addition to article "Eden" in the American edition of "Smith's Bible Dictionary"), the post-Eden home of the Adamic race may have been anywhere in the Persian or Caspian region, or other Asian, but with least probability in Armenia, taking into view the doubtless extensive country, called garden, from which Adam was driven out. There is no excuse for adopting the Mesopotamian valley for the Noachian Flood, with the Scriptures before our eyes. Huxley's labored argument becomes a huge purposed

jest if we suppose that he was not necessarily misled by commentators, and took the trouble to inquire whither the immediate descendants of Noah traveled after the Deluge. In Gen. 11:2, following a list of the Noachidæ in chapter ten, it is written: "And it came to pass, as they journeyed from the east,* that they found a plain in the land of Shinar, and they dwelt there." Shinar was Babylonia, the southern part of the Mesopotamian valley, the part south of Mesopotamia in its restricted sense. Hence, the Noachian Deluge did not occur there, and Huxley's elaborate argument slips away down the slope like the supposititious flood in that region. The tribes of Noah, journeying from the east, found the plain of Babylonia, implying that they came over or through highlands, apparently from a region south or east of the Caspian Sea, in or near

* A Bible lexicographer says: "The Hebrew is more correctly translated in the margin, also in Gen. xiii. 11, *eastward*, the writer, as it would seem, describing the position of Mesopotamia in reference to his own country rather than to Ararat." But, in Gen. xiii., Lot did journey eastward, whereas if the descendants of Noah had so journeyed it must have been from western Syria eastward. The clause "describing the position of Mesopotamia in reference to his own country" is nonsense here, because it gives no direction of the journeyings, whereas the sacred writer evidently sought to state the direction pursued after the Deluge.

the supposed first center of distribution of the race. They did not journey south or southeast from Armenia.

The Caspian lowlands are in the line of the extensive old sea that separated Europe from Asia, where, in a pluvial season, a renewed submergence, or an incursion of ocean, may have occurred. According to Prof. Marcus E. Jones, of Salt Lake City, rainfall alone, if but double its present amount, would raise Great Salt Lake in Utah (like the Caspian having no outlet) to nine hundred feet above its present level; and such great oscillations, he says, have repeatedly taken place in the Quaternary period, the rise covering a great extent of country. Reclus states that, if the concavity of the basin of the Caspian were filled, this sea would submerge several hundred thousand square miles of the Russian steppes. Indeed, Huxley, in the *Nineteenth Century*, 1890, writing on the Aryan question, supposes that when the Aryan race came into existence, there was what he calls the Pontic Mediterranean—a vast inland sea, including the Aral, Caspian, and Euxine (Black Sea), covering the plains of the Danube and the Volga, and discharging itself into the Arctic Ocean by the valley of the Obi. In the article by Krapotkin on the Transcaspian Region, in the *Encyclopedia Britannica*, evidence is given of the great

Post-Glacial changes in that region, especially elevation and desiccation, affecting seas, lakes, and rivers even in historic times. In short, since the human race began, there have been or might have been vast disturbances, and possibly by rapid as well as by slow causes, in the general region where the human family began to multiply, and while the race was within comparatively narrow limits. Nothing is more reasonable, and world-wide traditions affirm it.

FEATS OF THE MYTHOLOGIZERS.

The explaining away of these traditions, as pretty much everything else, by vagarists in comparative mythology, is as fanciful as the so-called myths they would explain, reducing, for example, the Polynesian forms of the tradition to the daily phenomenon of the sea at sunset engulfing the sun, or at moonset the moon. This is a mythologizer's guess, but it would be no argument against the wide traditionality of the Deluge if it had actually degenerated into a thousand fantastic forms or had been applied to various phenomena; it is still the world-wide tradition of a deluge, and very likely preserved through centuries by its local variations and applications, or even by taking on grotesque mythological phases, whereas in a simple traditional shape it might

long since have faded out. The mythologizers would have it that in the human mind some sublimated ideas of nature, especially of sun and sky, or cloud, became precipitated in deluge legends everywhere; but it is more likely that an actual deluge was vaporized into cloudy myths. The question remains, why is there a deluge at all in the prevalent myths, and one that seems very widely to preserve some likeness to the Noachian in incidental features?

HUXLEY'S INEXPENSIVE WIT.

Certain examples of Huxley's wit rather than humor occur here and there in this volume, of a kind on a level with the the big-worded cheap style of newspaper-item wit, particularly the wise language often attributed jocosely to Boston boys and girls. Such is his reference to Lot's wife as chemically changed into chloride of sodium, and Jonah making an experiment in submarine navigation, etc. According to his methods generally, it is a wonder that Huxley did not make the Jonah sea-monster a whale and discourse of its small throat or the small food of whales, especially as the Revised Version (by courtesy so called) retains the word whale* in

* The Greek *ketos* could just as well have been translated sea-monster, as the revisers must have known.

Matt. 12:40, just as in the next chapter, Matt. 13:38-39, it retains "world" for two very different things in the Greek, *kosmos* and *aion* (æon), occurring, too, in the same sentence. And it is a wonder that he does not bring in some allusion to Joshua as signaling down-brakes and pulling the reverse lever of the earth's motion, as if the Scriptures had something to say there about the earth's revolution.

BORROWED THUNDER.

The last essay in this volume is entitled "The Evolution of Theology: an Anthropological Study." It is no doubt serious, so far as a dipping into the Old Testament can be serious by one who, in the preface of his book, would class it and the New Testament with the Koran. The laugh here is not so much by as on Huxley, for the essay turns out mainly to be a rehash of the radical or negative criticism of the Old Testament which has been going on for a century and especially for the last sixty years. The very first sentences of Chancellor Schmauk's excellent summary and summary refutation of that criticism* are these: "The negative criticism claims that the religion of the Old Testament is an evolu-

* The Negative Criticism and the Old Testament. By Theodore E. Schmauk. New York: John B. Alden. 1895.

tion, not a revelation. Like all other religions, it was at first polytheistic and idolatrous. Beginning as an altogether natural product of the Hebrew mind, it developed by slow and gradual stages, passing into the pure monotheism of the prophets, and culminating in the complex ceremonial of the priestly law ;” and this hypothesis in very much of its further detail is repeated by Huxley, with added scraps about the idolatries of other nations and tribes, illustrating a similarity of superstition that no one would deny.

AN OLD TRUTH STRETCHED OUT OF SHAPE.

And, what is especially amusing, he quotes a long passage from Archdeacon Farrar about the idolatrous practices of the Israelites, as if it were a remarkable confirmation of his own borrowed hypothesis, instead of being in fact the common understanding of Christians in all ages, and clearly taught by the Bible itself, namely, that in Farrar’s quoted words, “a pure monotheism and an independence of symbols was the result of a slow and painful course of God’s disciplinal dealings,” the Hebrews being “under God’s providence educated into pure monotheism only by centuries of misfortune and series of inspired men.” The Bible often calls the Israelites a stiff-necked and untoward

generation This is the main point, but of course Huxley follows the unco' wise critics further, would make the Pentateuch a late fabrication, and picture the Israelites as mere heathen down to the time of the prophets—who, by the way, must have been very much inspired and non-evolutional to lift themselves and a nation from heathenism at once into the highest conceptions man can form.

THE BEAUTY OF THE NEW SHAPE.

On his theory he would have the Jehovah of Israel but an imagined spirit like a man in form and character, and but one of the spirits or Elohim of Sheol, though of a supposed superior and tutelar sort, which of course is a caricature of a truth possibly unknown to Huxley, but entertained by all Christians, that Jehovah appeared at times as the angel of the Lord and was the Son of God, or as expressed by Paul, in speaking of the wanderings of the Israelites, the spiritual Rock that followed them was Christ; and John says, "All things were made by Him." As to the seeming permission, under the old dispensation, of many things objectionable, and the anthropomorphic representations of Jehovah as moved by passions, these are old difficulties a thousand times made clear, and by the Bible itself, as in Paul's

discourse on Mars' Hill where he says that the idolatrous "times of this ignorance God overlooked;" and the ascription of anger or jealousy to Jehovah is all explained in the frequent little words "as if," used often and italicised by that common-sense commentator, Albert Barnes. And, indeed, if we throw away the Bible and go to Nature alone, we shall find a great deal of that terrible *as if*; the two words are small, but the meaning vast; Nature is as if angry with the wicked every day, and as if a jealous Nature, visiting the iniquity of the fathers upon the children unto the third and fourth generation. Let the objector first explain away Nature.

CARLYLE'S PROTEST.

The affected squeamishness that perverts the humane spirit of Christianity to a condemnation of the discipline God thought necessary under the old dispensation (even making the chosen nation his appointed executioners of vile and cruel idolatrous tribes, wedded to the worship of Ashtoreth, their Venus, and burning their children to Molech or Baal) should read the Latter Day Pamphlet, number II., of Thomas Carlyle, who was given neither to Bibliolatry nor, like many in these days, bitten with Bibliophobia; he says, and the same may

be said of Nature: "God himself, we have always understood, hates sin with a most authentic, celestial, and eternal hatred—a hatred, a hostility inexorable, unappeasable, which blasts the scoundrel, and all scoundrels ultimately, into black annihilation and disappearance from the sum of things. The path of it is as the path of a flaming sword; he that has eyes may see it, walking inexorable, divinely beautiful and divinely terrible, through the chaotic gulf of Human History, and everywhere burning, as with unquenchable fire, the false and death-worthy from the true and life-worthy; making all Human History, and the biography of every man, a God's Cosmos in the place of a Devil's Chaos. So it is in the end; even so, to every man who is a man, and not a mutinous beast, and has eyes to see." And it is just because they do dimly see or feel it, as the Christianity-suckled and sentimental critics do not, that the heathen lacerate themselves to propitiate the powers of Nature personified in their gods. And that is why they and we need the Bible that, even in the assaulted Pentateuch, makes the mercy and justice of the whole Deity known in memorable language: "The Lord, the Lord God, merciful and gracious, longsuffering, and abundant in goodness and truth, keeping mercy for thousands, forgiving iniquity and transgression and sin, and that

will by no means clear the guilty" (Exodus 34: 6-7). No higher conception of God is in the prophets, nor in the wisdom of the modern wise ; and this evolution of God was on Mount Sinai.

A VARIETY OF ASSUMPTIONS.

For the rest, it seems to be affected naïveté, not to call it impudence, with which Huxley, in his preface, assumes that all discussion hangs on verbal inspiration of the Scriptures ; that the "plain sense" is the sense he puts on them ; and that it is becoming "impossible for men of clear intellect and adequate instruction to believe, and it has ceased, or is ceasing, to be possible for such men honestly to say they believe, that the universe came into being in the fashion described in the first chapter of Genesis"—as if Dawson, Dana, Guyot, and very many others of scientific eminence, must be set down as muddy-headed, uninformed, and dishonest. With the same naïveté, if not impudence, he speaks of the notion that the earth was repopled from Armenia or Kurdistan, little more than 4,000 years ago, thus ignoring the limitation of the record to the Noachian race, and the vast difference of interpretation in respect to Bible chronology ; and elsewhere he ignores the fact that geologists, by accurate

observation of the recession of Niagara Falls and by data from other American rivers and from lakes, have fixed on 7,000 to 10,000 years as the period since the Glacial epoch, and the fact that there is no general agreement that vestiges of man are to be dated back earlier than the Glacial deposits—a reasonable or possible Bible chronology, if not Usher's, being thus confirmed.

But the sublimest assumption, in view of their repeated and utter rout, is that the destructive critics are above all others the men of scholarship and scientific methods—almost, if not quite, the only men of that sort—although much of the work of such men, as in Greek and Roman history and on Homer, proved for them a succession of defeats, and although the progress of Assyrian, Egyptian, and other discoveries, overthrowing much of the negative criticism in the past, foretells the final collapse of the later attempts to discredit the Scriptures as the record now stands. The negative and reconstructive critics may be men of prodigious learning and acuteness, but that this has been misapplied is believed by many scholars of probably equal learning and sagacity. And to call the destructive method the scientific one is comical in view of its results hitherto. It has been applied to Shakespeare, and might be applied to every author,

even in comparatively recent times. Its "spirit of scientific investigation" is a jumping to conclusions, in which hardly two of the pundits agree, and reminds one of Huxley's *faux pas* in his Bathybius, an inorganic precipitate mistaken by him for a low form of life, if not the primeval protoplasm itself. To them and to himself, his words may be addressed: "of infallibility, in all shapes, lay or clerical, it is needful to iterate with more than Catonic pertinacity, *Delenda est*," to which may be added, of the destructive critics, *eos ipsos deleverunt et delebunt*.

HUMORS OF THE NEW CRITICISM.

Of course there must be some incidental good in their work, though it be only a provocative of study in the right direction. But, outside of intentionally comic literature, there is nothing more comical than the successive hypotheses of the critics and the extravagant and absurd guesses and interpretations resulting. They are omniscient, too; Wellhausen says positively that the Jehovah-Elohim of Gen. 2 "is due to an editor who desired to soften the abrupt transition from the Elohim of one narrator to the Jehovah of the other." Wellhausen must have been there at the time and had a talk with the "editor;" and the beauty

of it is that this editor must have gone on softening the transition all through the Old Testament, for there is the same or like variation of the Divine name everywhere. And, of the first and second chapters, he says that, in the first, "vegetation and wet stand opposed, the plants springing up as soon as there is dry land," while in the second "the condition of vegetation is the moistening of the dry land"—"the earth, therefore, was originally not water but a parched desert"—all together a dry joke if he were not apparently in earnest.

Canon Cheyne, in his article "Cosmogony" in the *Encyc. Brit.*,* suppresses most of the ab-

* In a reference book, we should have the available space filled with details for our information and use, and, if matters at issue must be stated, the statement should be fair, pro and con—not a selection of points treated in the interest of the writer's individual or party view. Thus, under Cosmogony, we look for as complete an account of cosmogonies as the limits permit. Unfortunately, the *Encyclopedia Britannica* was edited in the interests of Biblical nihilists—so pronouncedly so that one is startled to find such a concession as this: "The chronology of the composition of the Pentateuch may be said to center in the question whether the Levitico-Elohistic document [such a document is taken for granted] which embraces most of the laws in Leviticus with large parts of Exodus and Numbers, is earlier or later than Deuteronomy. The answer to this question turns almost wholly on archaeological inquiries, for there is, perhaps, no quite con-

surditities of heathen cosmogonies, and would interpret what he does give so as to coincide with Genesis, which he brings down to their level, thus seeking to abolish the vast contrast. The dividing of the waters from the waters in Genesis he identifies with the Babylonian *cutting* in two, which it seems was not the waters, but, the goddess who presided over them (Berosus, however, interpreting her as the sea), her two halves making heaven and earth. "The chief differences arise," he says, "from the polytheism of Babylonia, and yet some have seen a survival of polytheistic language in Gen. 1:26." He must adroitly slide that in, though it is plain that the purpose of Gen. 1 was emphatically to set forth a supreme Creator, and therefore the 26th verse must be interpreted as giving a plural of dignity or of intensity, or in some other consistent way.* "In another cosmogony," he writes,

clusive reference to the Elohist record in the prophets before the Exile, or in Deuteronomy itself. And here arises the great dispute which divides critics, and *makes our whole construction of the origin of the historical books uncertain.*" Uncertain, after all.

*There is a Jewish tradition that when Moses was about to write the words "Let us make man," he cried out, "O Lord of the world, why wilt thou give men occasion to err about thy most simple Unity?"—to which he received the answer, "Write as I bid thee; if any man love to err, let him err." A wise fable, for every-

"we meet with the woman Baau, 'which is interpreted Night,' probably the *bohū* or chaos of Gen. 1, 2"—anything to identify mythology with Scripture. "The Old Testament contains three cosmogonies"—the third being Prov. 3, 19-20; 8, 22-31, and Job 15, 7-8. Referring doubtless to "let the waters bring forth," etc., he says: "The chief characteristic of Gen. 1 is the union of two apparently inconsistent phraseologies, the supernaturalistic and the evolutionary"—why inconsistent, even if they are there? He might as well get the two into the natural, popular language in Gen. 3—"thorns and thistles shall it bring forth to thee." He seeks to connect the Spirit of God, moving or hovering on the face of the waters, with the Polynesian "heaven-and-air god Tangaloa as a bird hovering over the waters," and remarks "in the earliest form of the narrative in Gen. 1 it may have been 'the bird of Elohim;,' 'wind' seems to be an interpretation." Perverse guesswork could hardly go further.

Such are specimens of these critics. They strain at a gnat and swallow many a camel, such as that the books of the law, excepting Deuteronomy (which they refer to near the thing the human mind can apprehend seems to be so presented that it can be perverted if one chooses to be perverse.

time of King Josiah), were manufactured by or in the time of Ezra and his assistants, all the local coloring and incident of the narrative having been craftily supplied by these redactors and priestly legislators, though such a fitting of circumstances and local facts (known more and more as true by new observations) and devised by such men is incredible. And the Jehovistic element in the Pentateuch they make not historical, but legendary. One would suppose that the craze of disintegrating the Pentateuch into Jehovistic and Elohistie and other fragments, while the fragment hypothesis lasted (Davidson, *e.g.*, breaking up Gen. 31 into thirty-five fragments by four writers), and the multiform vagaries of the next hypothesis, the supplementary, would have taught the later critics a lesson of prudence in attempting another solution; but each one of them is eager to outstrip every other in the race of guesswork. About the only tangible things they have to start with, in assigning late authorship, are a few questions of names and a few explanatory comments (such as in Gen. 36:31—"before there reigned any king over the children of Israel") which would seem to have been added by expounders or by copyists.

HUXLEY AND BIBLIOLATRY.

To return to Huxley, such remarks of his as that "wherever bibliolatry has prevailed, bigotry and cruelty have accompanied it," are not so original and uncommon as to require notice, except as inconsistent with his praise of veracity in the same paragraph. Every one is aware that bigotry and cruelty are characteristics of times and peoples, and, in Christendom, have been much more characteristic of Bible-lacking or Bible-suppressing times and places than any other; further, that the unchaining and dissemination of the Bible was contemporaneous with the new epoch ending in toleration and in the "freedom of thought" he speaks of in the next sentence—a freedom by no means restricted to those who reject or mutilate the Scriptures, which restriction is another insolent assumption, and characteristic of all sorts of Bible rejectors from the learned down through the common run of skeptics to mouthing spiritists, who all claim that freedom and science are wholly on their side and bigotry and behind-date ignorance on the side of those who accept the Scriptures.

BIBLE PIETY, PAST AND PRESENT.

But we need only go back to the time and community where and when our parents or grandparents lived, to know that the extremest veneration for the sacred book may coexist with modern enlightenment and with a most humane and tender spirit, and that it is felt by multitudes of the intelligent since the humanitarian sentiment and movement became dominant. Blessed be their memory—those pious souls, exalted and beautified by daily communion with the Word of Life, of whom we their children are too seldom worthy in this time of multiform unbelief and unsettled opinion, when even orthodox editors and church dignitaries make smirking obeisance to every prominent and unscrupulous satirist of the venerable faith, or meet his assaults with cooing half-remonstrance. We all need toning up to eternal Truth by large draughts of its divine Revelation, or, if that cannot be, by a Carlylean clarion, or, if not that, by the simple beauty of Burns' "Cotter's Saturday Night," when

"The cheerfu' supper done, wi' serious face,
They round the ingle, form a circle wide;
The sire turns o'er, wi' patriarchal grace,
The big ha' Bible, ance his father's pride."

And after they have chanted their hymn—

“ The priest-like father reads the sacred page,
How Abram was the friend of God on high ;
Or, Moses bade eternal warfare wage
With Amalek’s ungracious progeny;
Or how the royal bard did groaning lie
Beneath the stroke of Heaven’s avenging ire;
Or, Job’s pathetic plaint, and wailing cry;
Or rapt Isaiah’s wild, seraphic fire;
Or other holy seers that tune the sacred lyre.”

And well of such evening worship and
Scripture-reading did Burns add :

“ From scenes like these old Scotia’s grandeur springs,
That makes her lov’d at home, rever’d abroad.”

“ Science and Hebrew Tradition,” Huxley calls his volume. It is Huxley and Hebrew Tradition, or rather not even Huxley, but other critics. As he says in a saucy reply to the Duke of Argyll, “ they take the lion’s skin of scientific phraseology for evidence that the voice which issues from beneath it is the voice of science.” Precisely thus is the name of science taken by those who use it to cover their forced and fallacious arguments against the best gift of God to man, the revelation of Himself and of His Son, Jesus Christ our Lord.

HUXLEY’S PROCLAMATION, 1894.

In this connection may be noticed Huxley’s article in *Nature*, Nov. 1, 1894, which assumes

to be a review of the conflict of Revelation and science to date, and a forecast of the future. The following remarks are substantially the criticism referred to in the preface of this book as by the writer of this review.

The article no doubt gives a history of the subject as it has taken form in the minds of those who are adverse to Biblical faith. But, considered as a synopsis of the past and present state of knowledge and belief on the questions involved, it is wholly one-sided, unfair, and fallacious.

He asserts that there has been an ever-widening and long since impassable gulf between the old and the new, the reference being unmistakably to the Bible as related to modern science. Omitting certain expressions that bear on the intellectual if not moral integrity of deceased compeers, who were nevertheless "very eminent and at the same time perfectly sincere men," we have the statement that astronomers smoothed over and ignored their perturbations. This goes back, probably, no further than early in this century, when space-penetrating instruments revealed the great extent and multiplicity of the universe—a difficulty that was emphasized while it was magnificently explained by Dr. Chalmers in his astronomical discourses. The simple truths of God's infinitude and infinite condescen-

sion were all that devout astronomers needed to remember.* There was nothing to smooth over or ignore, either through perplexity or cowardly compromise.

Next, we are told that the difficulty of maintaining peace became insuperable as uniformitarian principles obtained the ascendant among geologists fifty years ago. As to catastrophes, there are none in the Scripture account of creation. As to great effects produced by the comparatively slow action of

*In this brief criticism there was no room to offer other considerations, such as the relativity of distance or of size. As the author of "The Stars and the Earth" (second American edition, 1850) has shown, the universe might be reduced to a million millionth of its apprehended extent and the dimensions of its parts, and yet we should not perceive the change if we and our standards of measurement were proportionately reduced; and so of time. Whatever may be the metaphysics of space and time, there is, as shown by this illustration, no absolute size, distance, and duration, so far as we can reason. Yet, lately, Spencer somehow hurls the immensity of the universe at Balfour; and one of Huxley's witticisms was his reply to a low-church lady, in effect that, considering the size of the universe, the Almighty could hardly care whether a certain ritual rector turned his face to the east or the west in some part of the church service. In one of Huxley's papers under review it would seem that his trouble about astronomy was only that space-penetrating instruments suggested infinite evolutionary time, and thus had nothing to do with the littleness of earth and man.

causes now in operation, the Biblical record offered no difficulty when it was observed that the word day is used in several senses, one much extended, just as it is elsewhere used in the Scriptures, and by us all ; in fact, had been so interpreted ages before modern geological research.

The first two points made by Professor Huxley are thus obsolete, and are of no more force and importance than the old controversy about the earth revolving around the sun. They are so simple that a schoolboy can answer them. As to uniformitarianism, there are observations and inferences by trained naturalists who recognize a more or less *per saltum* progress. And it is just as undeniable to-day as ever, though denied, that the rocks testify (so far as they give testimony) to rapid or even immediate wholesale exterminations of life and introductions of new forms, and this favors great impulses of life onward, more than it favors a slow development in some unknown region and gradual migration therefrom.

The statement is made that the provisional peace between the old and the new was finally abolished by the publication of the "Origin of Species." No doubt it was so in the view of many who were indifferent to or arrayed against the Bible. But it is a matter of common information that many men of science,

and not a few clergymen, conceded the doctrine of descent, without any disturbance of their scriptural faith, and indeed find a high theology in that doctrine. Here, too, it is plain that the professor's ever-widening and now impassable gulf is no gulf at all. Moreover, the gist of the "Origin of Species" is natural selection, and this has lost much of its favor with scientific men, and is acknowledged by the professor to be no essential part of evolution. The very title of Darwin's book is "On the Origin of Species by Means of Natural Selection."

The rest of his pronouncement is a reiteration of evolution as an historical fact as opposed to hypothesis. In the context, he inevitably uses the words theory, doctrine, problem, in place of the misleading phrase "an historical fact;" so this can be passed by. The important question is, what does he mean by evolution? He says without qualification "if man has come into existence by the same process of evolution as other animals." A succeeding clause is more explicit—"if that history [of man] is essentially natural." Both clauses are subjunctive, with undoubtedly the force of the indicative; and, if this is so, we have to say, and with emphasis, that it is not an historical fact, nor a theory justified by facts, that life, sensation, and rational mind have come into being by natural processes alone, and that man

has progressed to his present stage by such processes only. Where is the origination of any one of the three to be found in the rocks, and how could the rocks give the processes of origin or anything but results? And, if he includes the highest combined intellectual and moral development of mankind, where is it to be found except in the presence of the stimulus or atmosphere of faith in the one living and true God and the supernatural religion of His only Son, our Lord? Can the sufficiency of natural causes be found in the study of external conditions and experimental study of variation, to which the article refers as large fields of inquiry into the causes of evolution? Will the fact, for example, that the pluteus of a sand-star fails to develop spicules and ciliated arms when a slight excess of potassium chloride is added to the medium, throw any light on the origin of life, sensation, or man's spiritual nature? Will a million experiments explain why all things marched onward to and culminated in a God-like being who can comprehend nature and so is above it?

The clause following the conditional ones above quoted is in these words: "The frontiers of the new world, within which scientific method is supreme, will receive such a remarkable extension as to leave little but cloudland for its rival"—the rival being the "other con-

victions," the Biblical. The implication is that scientific method holds a minor place, if any, in the other convictions or in the mental habits of those who entertain them. What is scientific? The professor himself has well defined science in another paper: "Whatever doctrine professes to be the result of the application of the accepted rules of inductive and deductive logic to its subject-matter, and which accepts within the limits which it sets for itself the supremacy of reason, is Science." Now, evolution is a grand induction if it takes in all the elements that should, but in many minds do not find place. But, far grander and more all-embracing is the induction that takes in not only nature in the naturalist's sense, but its Divine beauty and meaning, its moral element, and its correlations with man's higher nature as well as its manifold provisions for his lower and for his civilized arts; and, not this only, but also physical geography as correlated with the stages of man's development and the movements in his historical progress, and this especially as connected with the place, time, and work of Christ—all which, set forth by Guyot in "Earth and Man," is unanswerable by naturalism; and, not only this, but the entire nature of man and his profoundest convictions and highest aspirations, the manifest power in nature and history that works for

righteousness, the virtual miracle of one great, progressive, incomparable revelation in the Bible, the life, character, words, and work of the Redeemer, and the mighty power of his Spirit in the reformation of individuals and communities—yes, takes in the facts pointing to a Divine evolution itself as something that moved majestically on to its Divine outcome. All these are as truly facts as belemnite or hipparion; and all point, not to a stream of conscious free reason in man that rises far higher than a source in unconscious material chance or necessity, but to the fountain of a foreseeing Reason in the universe and history—the GOD who at sundry times and in divers manners spake in times past unto the fathers by the prophets, and hath in these last days spoken unto us by His Son. Is all this likely to be “little but cloudland”? If so, it will ever be a cloud that grows larger and brighter as the world rolls on, and in its luminous bosom is God. It will prevail as it has prevailed, and will rain such light and life that its rainbow promise shall be more and more fulfilled—the promise of a new heavens and a new earth wherein dwelleth righteousness.

II.

HUXLEY AND CHRISTIAN TRADITION.

The main point of Huxley's volume of collected papers entitled "Science and Christian Tradition" does not concern the exegesis and the credibility of the New Testament. Unlike many deniers, he asserts and has asserted for some years that all things not self-contradictory in terms are possible, for example, even the turning of water into wine, inasmuch as, if the somewhat entertained hypothesis be true that all elements may be forms of one still more ultimate element, it is not impossible that carbon might be derived from the hydrogen and oxygen of water, and so the carbohydrates of wine be produced—all which may be one of his solemn jests on his part. In general, he does not object to miracles in themselves considered, though at times he does so object, but to the evidence; and this he sometimes scouts historically, and at other times changes his front and denies the possibility of evidence, or at least calls for proofs of a sort impossible in the past, such as the modern physiological tests of death in the

instances of resurrection. He labors to impugn the authenticity and authority, one or both, of the documents; elsewhere he pronounces these questions of little importance. "Not proven"—"lacking evidence," though "all things are possible," is the little song he sings, echoed by some newspapers and many nobodies.* This is the whole agnosticism of it. If you believe, it is purely a matter of

* The utterly anchorless and absurd style of reasoning, due to Huxleyan influence, may be seen in the following extract from a prominent daily journal, noteworthy wholly aside from the serpent question:

"Despite all this, the sea-serpent may be a myth. All these intelligent observers may have been mistaken. All these honest and truthful people may have deliberately lied about it. All things are possible. But if such be the case, it is one of the most extraordinary examples of delusion and deception of which the modern world has record. That so many men, at so many remote times and places, should all have been deceived in exactly the same way and with exactly the same effect is perhaps credible. That they should have uttered falsehoods, separately conceived but perfectly agreeing with each other, is perhaps also credible. But one may surely be pardoned for regarding it as somewhat more credible that they really did see what they professed to have seen, and that the depths of the sea do indeed contain vast creatures of serpent-like form, such as these numerous witnesses have described." All things are possible! One would think the editor ironical if he were not sometimes serious in the same vein.

faith; on this ground only can you stand, though it has been and still is held by many men, as able as ever lived, that the strength of New Testament testimony far surpasses that of any other in all antiquity.

THE AFFIRMATIVE SIDE.

If the question be narrowed to one of authenticity of documents and competency of witnesses, the question is not one for a scientific guerrilla, but rather for scholars and investigators who have made it their life-work; and as their investigations are exceedingly voluminous, intricate, and learned, and are growing in volume as well as more or less modified every decade, especially on the radical side, one can only take the general results as given by one or another camp into which the Biblical critics are divided for a century past, the one affirming and the other denying the authenticity and authority of some or all the New Testament books—not forgetting that the destructive criticism began outside of and hostile to the Christian churches, and has been most rampant in German universities and theological faculties that to a considerable extent are anything but Christian in our understanding of the term—promoted, too, by men who seemed ambitious to surpass each

other in bold novelties. On the side of the affirmers is a mass of evidence, and also the fact that the deniers have been forced to abandon some of their most important denials; still more, the eighteen centuries of continually and immensely accumulating weight of testimony to the power of the historic Christ and Christianity in human experience, spiritual and moral, and the ever-brightening glory of the Christ-ideal—all which is unaccountable on the hypothesis of the New Testament as an unauthentic scrappy mass of mixed fact and myth, the mythical element including much of the teaching and deeds of Christ, and even his resurrection and ascension. For him who drinks largely of the New Testament fountain no discussion is necessary; to him it is no impure or adulterated stream of life, and its purifying and strengthening virtues are its own evidence.

NEW CONFIRMATIVE DISCOVERIES.

On the side of the affirmers, too, are new discoveries from time to time. While this review is being written, appears "A Translation of the Four Gospels from the Syriac of the Sinaitic Palimpsest," by Mrs. Agnes Smith Lewis, who discovered the manuscript in the convent of St. Katherine, on Mount Sinai, in 1892. It

dates from the fourth century. Says the literary editor of the New York *Tribune*, it represents, probably, a translation made in the second century, and is a matter of no ordinary interest to New Testament students; also that two authorities, Nestle, of Ulm, and J. Rendel Harris, who are not given to hasty conclusions, think that it is the very first attempt at rendering the Gospel into Syriac; and the editor goes on to say—a noteworthy concession from a journal of Huxleyan proclivities: “If, as is most probable, this manuscript carries us back to the middle of the second century, it braces the conclusion, which, even before its discovery it was difficult to resist, and which was powerfully supported by the testimony of the Diatessaron, that our four Gospels were in wide circulation in Syria by the middle of the second century; that, as Harnack observes, they had already taken a place of prominence in the Church, and that no others had done so; and that, in particular, the fourth Gospel had taken a fixed place alongside the Synoptic Gospels. In that case their composition must be assigned to a date closely approaching, if not identical with, that to which the Church has commonly referred them—the latter part of the first century. When the conditions are considered under which documents acquired recognition and currency in that age, the slow

process of transcription and the consequent scarcity of copies, the imperfect and precarious means of communication between distant regions, the Oriental habit of relying upon oral tradition—fifty years is not an excessive allowance for the attainment of a circulation and influence such as should lead to translation into a foreign tongue and working up into a combined Gospel.” Such is a single strand of the great argument in favor of the authenticity of the Gospels.

HUXLEY'S SINGULAR DISCOVERIES.

The present object is to see what “the protagonist in the struggle between truth and superstition” has to say, in the name of science. A quarter of the long preface of twenty-eight pages, preceded by a page from the now obsolete Strauss, is devoted to a vindication of himself in his usual style of semi-humorous posturing and phrasing, and here in the very conscious if not vainglorious character of protagonist. In the course of his experience he says that singular discoveries rewarded his industry—that “the ecclesiastical Moses proved to be a mere traditional mask,” etc., as if it were a discovery of his own instead of the inference of the destructive Biblical critics. With derivative references to the day of Pentecost, he

protests against the name "infidel" as objurgatory, though it is difficult to understand why, unless it be that the dictionary sense (not in itself opprobrious) relates to an attitude that is really revolting to the sentiment of Christendom, and is felt to be so revolting; otherwise, one would suppose that the name would be gloried in by one whose volumes cover its dictionary sense with constant emphasis.

WHAT HE KNOWS ABOUT THE SPIRITUAL WORLD.

Next, he attacks "the spiritual world," which he resolves into a demonic world, and this into swarms of evil and malignant spirits to whom this world has been given over, directed by a supreme devil—a belief without which the "theory of salvation by the Messiah falls to pieces." For this queer assertion he quotes John's epistle—"to this end was the Son of God manifested, that he might destroy the works of the devil"—as if that were the only or chief way the New Testament represents the great and manifold mission of Christ. But he goes on to say that *a priori* notions about the possibility, or the impossibility, of the existence of a world of spirits have no influence on his mind; it is a question purely of evidence; and, for most people, the question

resolves itself into that of the trustworthiness of the Gospels. To which we can say amen, excepting the natural evidence of the Supreme Spirit, as manifest in nature, history, and the soul of man, and excepting the evidence we have of a present world of spirits made up of the spirits of living men, and the high probability, for many reasons, of their continuation in another stage of existence as immortal. In other respects, neither Huxley nor we know anything about spirits outside of Revelation, unless we find some further revelation in visions of the dying who behold bright beings unseen by others. Our belief, however, is confirmed by many natural considerations, as shown in a following essay on arguments for the unseen.

HIS ANALYSIS OF THE GOSPELS NOT NEW.

He proceeds in a dozen pages to analyze elaborately the four Gospels as containing parts common to the four, other parts to three, others to two, and each its own peculiar passages. And this he does, though he admits that the problem has been clearly stated and discussed, in works accessible to, and intelligible by, every English reader, and has been discussed during the last hundred years. Yes, and nearly sixteen hundred years ago, Eusebius

made the same analysis of passages peculiar to one, and those common to two, three, and four Gospels; and nearly seventeen hundred years ago Ammonius and Tatian compiled Harmonies of the Gospels. There has been no end to the vagaries of critics to account for the agreements and variations (no real contradictions) of the four narratives, some dreamers even imagining that there must have been at least eight or ten documents from which the Gospels were compiled, whereas it is well enough settled that Matthew, Mark, and Luke wrote their versions within thirty or forty years after the death of Christ; and (whatever writings may be referred to in Luke 1) it is most reasonable to suppose that until then no full written form had been thought necessary, and the synoptic statements had very likely come to be the fixed oral repetition by the apostles and disciples in recounting the life and words of the Lord.

THE GOSPELS SEVERALLY.

Why there were four Gospels, respectively for the Jews, the Romans, the Greeks, and, later, John's for all advanced Christian communities, has been abundantly explained.*

* Most clearly, compactly, and with fresh explications, by the able managing editor of the Standard Dictionary,

Enough here that it is not a matter simply of certain old manuscript copies dating back to the fourth century. The evidence superabounds that the Gospels were known to and quoted by pupils and associates of the apostle John and by others immediately after his day, and were known as the four in the second century and regarded as the authentic production of those whose names they bear. The early evidence is strong in favor of Matthew ; and, as to John, the old fight against the genuineness of his gospel has been given up by many scholars of the first rank ; yet Huxley says no impartial judge can go beyond the admissions of a possibility about the latter, and of the former he says that he "cannot discover that any competent authority now maintains that the apostle Matthew wrote the Gospel that passes under his name." Surely his reading must have been all on the negative side, or else he is bluffing in the style of those who pretend that all scholarship or all science is on their radical side—an impertinence to hearer or reader, and an indignity to good opposing authorities, or, shall we call it, a feature of intellectual pretense and exclusiveness like the social sort in city life.

Dr. D. S. Gregory, in his book "Why Four Gospels?" republished by Funk & Wagnalls, New York, 1890.

HIS ACKNOWLEDGMENT.

However, Huxley must have due credit for a very sensible acknowledgment in concluding his preface, to wit: "For myself, I must confess that the problem of the origin of such very remarkable historical phenomena as the doctrines, and the social organization, which in their broad features certainly existed, and were in a state of rapid development, within a hundred years of the crucifixion of Jesus; and have steadily prevailed against all rivals, among the most civilized nations in the world ever since, is, and always has been, profoundly interesting; and, considering how recent the really scientific study of that problem, and how great the progress made during the last half-century in supplying the conditions for a positive solution of the problem, I cannot doubt that the attainment of such a solution is a mere question of time."

And we may add that the vast and serious problem will hardly be solved on his view of the Gospels as a fungous growth or weedy tangle of ignorant, superstitious, and discrepant legends; also, that the net result in the progress of the study has been to confirm the New Testament.

HIS SUPERNATURALISM.

Following the preface is the "Prologue." He deplores, or seems to deplore, polemical writing as more or less of an evil, and as having an air of unfairness in presenting only one side; and he has hesitation in reprinting his essays, though he does reprint them in one collection in 1892, and in another collection with additions in 1894. He thinks it necessary when the interests of truth and justice are at stake. How much truth and justice are sought by him can be inferred from this rapid review. Then he resolves all his controversy into one question—the natural versus the supernatural; reduces all religions to information about supernatural beings (setting aside certain ethical concomitants) and their interference with ordinary events; and he asserts that all this is more extensive and exact and its influence the greater as we go back in time and to the lower stage of civilization. After a survey, from his standpoint, of the contests of the Reformation and subsequent times down to the "evangelical supernaturalism" of Wesley and Whitfield, he goes on to criticise a publication in favor of church authority by thirty-eight clergymen of the Established Church of England.

WHAT IS THE SUPERNATURAL ?

He is quite right in making the supernatural the great point at issue. That is what he is fighting all along ; and that is what the negative criticism of reverend and other critics, as represented by the most "advanced," is really driving at, under whatever pretext of literary criticism.* But what is the supernatural, in its breadth and height? As already noticed, Huxley would concentrate it in "demonology," and secondarily the miraculous. But, the supernatural in its highest meaning and full glory is the God above all, the Infinite Reason, Right, and Love, manifest in nature, history, and the soul—the Unknown God of whom Paul said at Athens, not he is unknowable, but

* The most advanced in England is the Reverend T. K. Cheyne, Canon and Oriel professor in Oxford. In his "Founders of Old Testament Criticism," he is very impatient with the slow progress of his fellow-workers in England, such as Doctors Davidson and Driver. He reminds one of a personal anecdote told by Huxley. On a certain occasion he was belated, and hailed an Irish "car," saying to the driver as he jumped on: "Now drive fast, I am in a hurry." Whereupon he whipped up his horse and set off at a hard gallop. Nearly jerked off his seat, Huxley shouted, "My good friend, do you know where I want to go?" "No, yer honner," said the driver, "but, anyway, I am driving fast."

“Him declare I unto you ;” and who is further and fully declared in His Son, the brightness of His glory. Compared with Him, angels, good or evil, are as nothing, and, compared with His all-upholding and all-directing power, miracles are but a few incidents adapted to the people and times when they were necessary.

In its grandest and all-embracing sense, the supernatural is not an information common to all religions and more extensive and exact as we go back in time to the lower stage of civilization. Just the contrary. And the Bible religion is not, like other religions, an extensive and exact information about supernatural beings ; just the contrary, as the reader may see by comparison in the third essay of this volume, on pseudo-revelations of the unseen.


WHAT IS THE CHRISTIAN RELIGION ?

As every one ought to know, the Christian religion, not referring here to its system of theology, differs wholly from all other religions in two supreme respects : first, it makes an inward spiritual renewal the prime requisite, instead of observances ; and, secondly, it makes love, love to God and man, the fulfilling of Divine law, instead of slavish obedience to maxims and prohibitions. In particular, it teaches that the Old Testament law is to be

taken in its comprehensive spirit, and that it was a schoolmaster to bring men to Christ, convincing of sin and educating in holiness. The constant attempt to classify and identify Bible religion with all religions, either shows an ignorance of its real nature and scope, or else is a trick unworthy of a man of ordinary intelligence and truthfulness. And what is the "evangelical supernaturalism" of Wesley and Whitfield, and of all preachers of the real Gospel? Is it discoursing on angels and devils? How often has the reader heard that? Is it not rather the preaching that "God so loved the world that he gave his only-begotten Son that whosoever believeth on him might not perish, but have everlasting life"? By common consent of Christian teachers, it is summed up in that, along with Christian ethics.

THE CHRISTIAN RELIGION NOT DECAYING.

There has been no progressive elimination of the supernatural from its originally large occupation of men's thoughts, as Huxley says, if it be taken not in his low sense but in its high and worthy sense; on the contrary it has ever a larger place in high thought, and also in the evangelical movements and influences that reach down to the bottom of society and afar to all nations, as never so extensively before in the

history of the world, even enlisting innumerable youth and lay men and women in work that once was almost limited to the clergy. Its mightiest recent development came as an unlooked-for, unlabored-for, simultaneous revival in a large part of this country, in 1857-85 —a thronging of all classes and beliefs, or unbeliefs, to places of prayer—a joyous, singing, lay revival, new in history, with which the clergy had little to do as initiating and promoting, and even confounding their methods and maxims, as the great revivalist, President Charles G. Finney, confessed. And the great

* Not a movement originating in and spreading everywhere from the Fulton Street prayer meeting, as some suppose. In no city was the upheaval more characteristic and powerful than in New Bedford—a city where the dominant influences had long been so adverse that the evangelicals hardly dared call their souls their own. By the advice of the writer of this, a union meeting was appointed solely to bring the evangelical churches more into co-operation, and with no thought of a large attendance, much less of an imminent revival—no thought whatever of any New York meetings. An unexpected crowd came, and the Spirit of God almost literally as a rushing mighty wind. Strange that the peculiar nature of the simultaneous movement everywhere in the North, and its relation to the civil war, and to what may almost be termed a new dispensation, has been overlooked by many, who only talk of the financial crisis and the Fulton Street meeting.

wave swept on year after year in the midst of our civil war, making every camp a praying and singing camp-meeting; and it still rolls on in all sorts of religious and charitable lay activity and organizations in every denomination, or outside of churches—one crest of the flood gathering in the fifty thousand young “Christian Endeavorers” from all the States, met together jubilantly in Boston this summer of 1895.* It was no mere reaction from business disasters in 1857-58, as the cynical say, for no such a phenomenon was any of the revivals in previous business reverses, and none of the old type of revivals has occurred generally

*The *Boston Journal*, a very unsectarian sheet, said on this occasion: “Its 39,394 societies form an army more powerful than that of the Crusaders, and it is an army organized on nineteenth-century principles and trained to fight against existing evils. The Christian religion does not decay in spite of the predictions of false prophets. It has greater potency, greater scope, and greater vitality at the close of this century than ever before, and it is gaining steadily.” And the *Boston Herald*, also unsectarian, remarked that “none of the various addresses have revealed anything more than the regular evangelical beliefs, but there has been an intense devotion to the central truths of Christianity, and it has been an earnest appeal to Christ and humanity that has been uttered on the platform.” Witness also the growth of the Moody institutions and conventions at Northfield, and the like elsewhere, and the undoubting Bible faith that inspires them.

since, even in the sore reverses of 1894. It was a great step of Christianity onward, bringing out the multitudinous forces of the churches.

And in this land the churches have kept pace with the population all along, never apparently feeling the shock of the naturalistic phase of new science that came thirty-six years ago, even as they suffered nothing in strength from other new phases several times earlier in this century, and nothing from the destructive criticism that has been chattering and clattering for half a century. There has been and is no dying away of supernaturalism in its worthy sense, and certainly not in many of the best scientific as well as the best philosophical and theological minds,* however many individuals have been led into the "materialistic slough" or into the agnostic apathy. And even the distorted shadows of the supernatural in theosophies and spiritisms have a great following, never greater. Huxley thinks that the extant forms of supernaturalism will undoubtedly die hard. Yes, it will be very hard. But he thinks that science will kill it all. It does not seem really to have suffered from science so far, in general, or in the minds of many leaders and students of natural science.

* Witness the magnificent Phi Beta Kappa oration, "Recognition of the Supernatural in Life and Letters," by Dr. R. S. Storrs, at Harvard, 1881.

THE RELIGION OF NATURALISM.

Incidentally, he shows how little religion there is in naturalism and how much the Divine Revelation is needed, when he says: "Nature, so far as we have been able to attain to any insight into her ways, reckes little about consolation and makes for righteousness by very round-about paths." This he remarks in reference to the complaint that the destructives would take from us the solace of religion and the foundations of morality, and his remark if true shows that the complaint is justified. Nothing, on his showing, would be left but pitiless nature and very evasive evidence of the moral in the universe. It could hardly be as bad as that, however, as witness a foregoing quotation from Carlyle, not to speak of the apostle Paul in the first chapter of Romans; but it is all that would remain to Huxley and his genus, if Christianity were blotted out. And this appears further in the rest of the essay, where he would make consciousness and reason but stages in a purely natural progress, man no different in kind from animals, though differing in degree, the moral in nature presumably as absent now as in the ages before man, morality but tribal self-preservation in its origin and ground, and religion having no essential connection with it. If all this is the

upshot of earth's and man's progress upward, and is to be accepted as the final result of science, one would say that the Fall (which he scouts), if it did not occur in Adam's day, is now coming to pass. The doctrine is degrading and beastly to the last degree.

HE EULOGIZES THE BIBLE.

The prologue closes with nothing less than high praise of the Bible, strange to say. After throwing discredit and contempt upon it in these essays, he says: "It appears to me that if there is anybody more objectionable than the orthodox Bibliolater, it is the heterodox Philistine, who can discover in a literature which, in some respects, has no superior, nothing but a subject for scoffing and an occasion for the display of his conceited ignorance of the debt he owes to former generations. Twenty-two years ago I pleaded for the use of the Bible as an instrument of popular education, and I venture to repeat what I then said: Consider the great historical fact that, for three centuries, this book has been woven into the life of all that is best and noblest in English history," etc. In the course of a couple of pages in this strain, he remarks: "By the study of what other book could children be so much humanized?" etc.—this word being used

in the scholastic sense, probably; and again: "Throughout the history of the western world, the Scriptures, Jewish and Christian, have been the great instigators of revolt against the worst forms of clerical and political despotism. The Bible has been the *Magna Charta* of the poor and of the oppressed; down to modern times, no state has had a constitution in which the interests of the people are so largely taken into account, in which the duties, so much more than the privileges, of rulers are insisted upon, as that drawn up for Israel in Deuteronomy and in Leviticus; nowhere is the fundamental truth that the welfare of the state, in the long run, depends on the uprightness of the citizen so strongly laid down. Assuredly, the Bible talks no trash about the rights of man; but it insists on the equality of duties, on the liberty to bring about that righteousness which is somewhat different from struggling for 'rights;' on the fraternity of taking thought for one's neighbor as for one's self."

He proceeds to illustrate the democratic influence of the Bible in history down to the time when "from the sixteenth century onward, the Protestant sects have favored political freedom in proportion to the degree in which they have refused to acknowledge any ultimate authority save that of the Bible."

But he would confine its power to its "appeals, not to reason, but to the ethical sense"—as if its democratic influence was due to its injunctions rather than to its great doctrines of one Heavenly King and all men as subjects and immortal children of that King eternal, immortal, invisible, the only wise God.

It is to be hoped that Huxley's praise of the Scriptures was sincere. If it was, it is very difficult to regard his very satiric essays as at all serious. It is not the point that he excepts here the "cosmogonies, demonologies, and miraculous interferences." It is that here he expresses profound respect for a book which elsewhere, as we have seen and shall see, he caricatures in the language of a common reviler—for example, speaking frequently of the Gadarene scene in the Gospels as that of the "possessed pigs." And this book, pervaded all through by the supernatural, and, as he thinks, by gross errors, he recommends for use in schools, and asks "by the study of what other book could children be so humanized?" When and where is he serious? Possibly he was in earnest in the school matter, since he would have the Biblical school instruction in lay hands, in the hope and belief, as he says, that the theology and the legend would drop more and more out of sight. But, if the theology of the Bible and all that he considers

legend were dropped, there would not remain much of either flesh or skeleton ; it would be a residuum much like that in the ingenious versifier's rhyme for Timbuctoo, making a cassowary eat the missionary, "skin and bones and hymn book too."

HIS TWO WORLDS.

The next two essays, "Pseudo-Scientific Realism" and "Pseudo-Science," have little to do with the title of the book, "Science and Christian Tradition." The first contends against the assumption that natural laws are entities instead of records of the observed order of nature, and discusses natural catastrophes ; and the other essay takes up the same subjects in the same or other relations, which will be noticed later. Many of the incidental remarks might be reviewed. He admits that modern science recognizes two worlds, the physical and the psychical, with no bridge yet found between the two ; elsewhere he objects to cutting the universe into two halves, the natural and supernatural ; yet, so far as the psychical man is above nature as comprehending it, controlling it, creating it anew by creative ideas, and exercising (under any tolerable theory) a God-like freedom, man is of one world, the natural, and of another world, the supernatural, just as

Huxley in his way makes two worlds of the physical and the psychical; and talking of worlds, since man is man only in his divinest elements, one is reminded of George Herbert's "Man is one world, and hath another to attend him." In short, we cannot get rid of a nature and a supranature, against which latter Huxley inveighs.

On another page, he speaks of the supersensible theological world which was created, or rather grew up, during the first four centuries of the Christian era. The language would seem to imply that the seed and stalk as well as the flower dates back no further. But if he means only that which was peculiar to the demonology of a corrupted Christianity, the words supersensible theological world are like many other of his invidious characterizations.

HIS RULES OF NATURE.

Again, he says: "The admission of the occurrence of any event which was not the logical consequence of the immediately antecedent events, according to these definite, ascertained or unascertained rules which we call the 'laws of nature,' would be an act of self-destruction on the part of science." What is his "logical consequence?" In these essays he contends that there is nothing but observed

order (meaning sequence) of events—that we know nothing about any force or necessity behind them, nor of cause as cause. What do his rules of nature amount to? His rule is not a rule proper but a mere sequence of facts, thus far, or rather as far as we happen to know—a sense not at all in the verb rule (from old French for Latin *regulo*, regulate), and it does not exhaust the secondary noun sense of an ordinary course of things, for this is and must be understood to imply some principle or cause in continuous action, as when we say selfishness is the rule in business or drouth is the rule in August. He says: “We commonly hear of the law of bodies falling to the ground by reason of the law of gravitation, whereas that law is simply the record of the fact that, according to all experience, they have so fallen (when free to move), and of the grounds of a reasonable expectation that they will so fall,” and he discards the phrase “attraction of gravitation” because we know nothing of any attraction. It is, then, simply, that number one fell, and number two fell, and number three, and so on; that is all we know. What ground of what reasonable expectation? for it is nothing but a *record* of the past thus far, in his view. What reason? There is no solid ground for reasoning about the future on his theory, and expectation is mere conjecture. The only sure ground is

that like causes produce like effects, and that cause implies properties of substance as powers to produce effects.

HIS INCONSISTENCY ON THIS SUBJECT.

His agnosticism, which would eliminate all cause and force, and of course the Supreme Cause, as beyond the scope of knowledge, should be consistent. He talks much along here of the "store of energy" in nature, and the conservation of energy. But what, on his scheme, do we know of energy or its store or of its conservation? He refers to muscular work; but what do we observe? Muscle is exercised; waste is ejected; those are the observable facts; but what can we observe of a molecule of assimilated food liberating a part of the greater energy needed to hold its many atoms together, when it splits up into simple carbon dioxide and water, a part taking the form of muscular contraction and a part the form of heat? All this is taught by science and is doubtless true, but it is not what we observe. It is what we infer, and rightly, of causes and effects behind observed sequence. What do we observe of the molecule, the energy in it, the amount of this needed, the liberating, the splitting, the change to muscular work and to heat? Here

is a string of things out of the reach of observation, involving a string of reasoning about causes and effects, and absurd without the idea of cause, which is intuitive and fundamental in observing, in thinking, in science, and inevitable in the mental experience hourly of every man, scientific or unscientific—a necessary idea, and its excitation just as much a matter of experience as the sight of a stone falling. His own language refutes himself on many a page; for example, speaking of possible geological catastrophes, he says: “Not a link in the chain of natural causes and effects would be broken.” Here he has causes and links and a chain of them. Science is above all the knowledge of causes; first, it is observation of facts; secondly, correlation of these into system and law; thirdly, explication of causes; and, contrary to Huxley, by some eminent scientists in recent years, science proper has been resolved into the study of force.

CONDITIONS ARE NOT CAUSE.

Nor can cause be reduced to the conditions attending change. Pat thawing dynamite at a stove, and the composition of the nitro-glycerine, are a set of conditions for a disastrous result, and the disaster requires us to infer some action from something causal, something

of power in action, to which the conditions are elements and occasion. Beginning back further with the compounding of the explosive, and putting all together, we have only chemist, glycerine, nitric and sulphuric acids, absorbent siliceous particles, Pat, shanty, stove, heat, noise, flying fragments of Pat and shanty. That is all we get in a record of sequence of facts considered as all we can observe ; science would end there, in Huxley's philosophy, instead of beginning there, as it does. The heat vibrations communicated to the chemical compound, causing its molecules to vibrate until, by reason of the weak combining power of the nitrogen, the chemical structure breaks up and its atoms rush together into new combinations with a mighty impact that is converted into heat vibration, so powerful as instantly to force the new molecules into vibrations so energetic that they assume at once a gaseous state of great volume—all this is causative, known by reasonable inference from the observable facts ; it is behind and beyond the mere sequence of these. And there are abundant facts that point straight, not only to secondary or efficient causes like these, but to a Supreme Cause, an Infinite Beyond-all. Everything points thither. Agnosticism should begin at the beginning if it discards this final conclusion. Huxley knows a great deal about things be-

hind observation in the world of phenomena; it is a large part of science. But if science is to be agnostic it should recognize nothing but visible fact—nothing but cartridge, Pat, shanty and the resulting fragments.

GEOLOGY SHOWS INTERVENTION.

Under "Pseudo-Science" (mostly a repetition of the subject of natural law), Huxley asks: "Is the Duke of Argyll prepared to say that any geologist of authority, at the present day, believes that there is the slightest evidence of the occurrence of supernatural intervention, during the long ages of which the monuments are preserved to us in the crust of the earth?" Yes, the Duke could say it. High names of geologists, too familiar to be mentioned, and all geologists as well, and evolution itself, could be adduced to show that the geological evidence legitimately goes back to a time when doubtless life was not, and when, probably later, sensation was not, and, later, rationality was not; and there is plenty of high authority, among geologists and others, for the belief that these factors intervened—were from creative power—were not in that inorganic matter which we know and which always must have been what it now is, in its properties. From the standpoint of biology, one of the cluster of sciences

that make up geology, the case is well stated in the last five pages of Wallace's excellent book on and in favor of "Darwinism."

HIS EXAMPLES OF NATURAL LAW.

On other pages we have some of Huxley's illustrations of law. From him we must suppose it science; in others it would be pseudo-science. "I presume that it is a law of nature," he says, "that 'a straight line is the shortest distance between two points.' " Omitting the confusion here of the concept line with the concept distance, it may be asked if he is joking. He seems to be in earnest, and he makes a definition in geometry a law of nature! Immediately following this, he has another and a proper law of nature, that the mass of matter remains unchanged whatever modifications it may undergo; and he remarks that "it is quite possible to imagine that the mass of matter should vary according to circumstances, as we know its weight does." Annihilation of a part of the mass is then a matter of "circumstances." In formal physics, mass is defined as the measure or expression of the quantity of matter in a given body; and gravity and the amount of force necessary to move a body may vary, hence of course the measure or expression; but the persistent amount of matter in a given

body is fundamental to the idea of mass. Following this instance, we have the law that all men are mortal, and he would be glad to be informed of a necessity of death that can be deduced from biological considerations, and mentions the lowest forms of life, referring doubtless to the endless self-division of some of these. But the proposition is that all men are mortal, and if there be no necessity of death, such as the apparently inevitable shrinking and hardening of tissues, with loss of vital force, in the decline of life, a good many old people would like to know it. But Huxley did not believe in any vital principle or force, for the fallacious reasons well answered in Dr. James H. Sterling's essay "As Regards Protoplasm," and requiring no notice here. Dr. Oliver Wendell Holmes said that death "is as much a physiological necessity as life."

THE DILEMMA HE OFFERS.

Further on in Huxley's lucubrations about law, we have a dilemma offered us: if mind cannot affect matter, "it follows that volition may be a sign, but cannot be a cause, of bodily motion;" if it can, "then states of consciousness become indistinguishable from material things, for it is the essential nature of matter to be the vehicle or substratum of mechanical en-

ergy." He had declared, as we noticed, that the physical and the psychical are two worlds, and the bridge between them had not yet been found. But here he offers us two bridges, between which we may take our choice. First, volition is but a sign (a sort of preceding echo or a reflection or symptom or rocket or waved rag) of a bodily motion that originates only in matter; or, secondly, mind is matter, because matter is moved by mechanical energy, and he knows, if nobody else, that the energy cannot be under the control of anything above matter. Rather flimsy bridges and a foolish dilemma.

PRAYER.

The next succeeding paper, "An Episcopal Trilogy," begins as a love-feast with two bishops, whose discourses on science Huxley heartily approves, except that he thinks that one of the bishops should not have presumed that there is any scientific objection to the efficacy of prayer on the ground of inconsistency with the order of nature, its efficacy being no more impossible than miracles, and the only objection to both being lack of evidence. Well, the numerous affirmed instances of answer to prayer, other than spiritual, can be endlessly discussed as authentic or not, and as

answers or only coincidences when authentic. Believers in the Bible will find instances there. But it is rather remarkable that both apologists and objectors on any ground, if we grant but for argument that there is an omniscient and omnipotent God, do not remember that He is the inspirer of effectual prayer, and that the prayer and the thing prayed for alike came into His eternal order, so that there is no change of the order; and if a soul truly gets into communion with God, influenced by Him, there will be no heaven-inspired prayer that is not effectual. What to us if the answer be provided for to-day or from all eternity? It was the testimony of that cool, clear-headed, eminently logical man, Charles G. Finney, president of Oberlin College, who began his career as a skeptical lawyer, and was converted by his chain of reasoning, that, in his nearness to God, he found at times that he could not pray with his whole heart for certain persons, though having no prejudice against them, and that he could offer the effectual fervent prayer in every case where conversion followed. Perhaps there is much in this that few experience, but the philosophy of it is the clear philosophy of effectual prayer, whether for rain or regeneration. It is not a present miraculous or fortuitous but an everlasting Divine coincidence

HIS POSSIBLE GOD.

Huxley thinks that there may be, for aught he knows, "somebody, somewhere, who is strong enough to deal with the earth and its contents as men deal with the things and events which they are strong enough to modify or control [they control?—if volition is but a sign of bodily motion, and this originates only in mechanical energy, nothing higher], and who is capable of being moved by appeals such as men make to one another." But, he adds, "this belief does not even involve theism, for our earth is an insignificant particle of the solar system," etc. Elsewhere, if memory serves, he thinks there may be a being who can act on the solar system. Of course, he is speaking only of possibilities, not of his belief. But, here we have the immensity of the universe appealed to, when that immensity and its measurements are purely interrelative. The interesting thing, however, is that "this belief does not even involve theism." Let it go at that. If there may be a being who can control the physical earth, or the solar system, he is quite enough God for us, and we "see no great difficulty in supposing" that he or his Eternal Father might as well control the universe,

THE BISHOP AND MIRACLES.

The third bishop is not named; Huxley refuses to name him, having a very sensitive shrinking "lest I fall under high censure for attacking a clergyman," though he leaps boldly into the arena when it is only a well-known duke or a premier. This bishop inveighs against "a non-miraculous, invertebrate Christianity" with just indignation, but he is infelicitous in saying that Christianity is "essentially miraculous," when he should have said (perhaps did say) that it largely involves the supernatural in its highest sense, was verified by the Incarnation, Resurrection, and Ascension, and was attested by miraculous incidents, subordinately, to those who "require a sign." The bishop also asserts that Christianity "rests on miracles"—quite right if he refers to the Divine incarnation and to the Resurrection and Ascension, as fundamental facts, but too loosely expressed if without qualification. We may also add that it was necessary that Christ should show his Divine power over all things, including diseases of body as well as of soul, and death and the powers of darkness.

In this connection Huxley claims that deniers of the miraculous may, as highly as others, estimate the purely spiritual elements of the Christian faith. What, more or less, are these?

—only the Christian virtues and moralities, and love to God and man, whether we believe in God or not? Christianity, in the only documents and spiritual history of it we have, claims that those elements are by and through a Divine Man who is the Light and Life, the one spring and realization of those elements. That is the warp and woof of Christianity; that is the building, and to desupernaturalize it and hold up its practical virtues as all, is to pull out some of the stones and hold forth these as the whole architectural structure. It is to take specimens of the superstructure as the foundation, “which is Christ” and all that he is shown to be in the only records we have of him and by his apostles and their associates.

SCIENTIFIC MEN AS SHARP AND VERACIOUS.

On the next page comes in a claim that scientific men are those who keep the estimate of the value of evidence up to the proper mark. No doubt their training, like that of the law, or the detective service, promotes a habit of rigid questioning; but they are as liable as any persons to be warped by preconceptions and for other reasons, especially when they take up theory or a controverted question, as Huxley’s discussions illustrate. But, if there be any Christians who have not enough good

evidence on which to ground their faith, enough to satisfy them, the sooner they dig for it the better. He also mentions the higher standard of veracity among scientific men. Undoubtedly science promotes this in men who are not given to sophistry and sophistication, as too often in controversies like those now under review.

SCIENTIFIC ACCURACY.

He might have made a further point just here in respect to accuracy of statement, involving also strict ascertainment of truth and fact, and beyond that a wise reserve, as too often insufficiently favored by a scholastic or literary habit of mind. For this reason among many others, the writer of this review, twenty-five years or so ago, recommended in a publication the establishment of a professorship of natural science in every theological seminary, even if not much time could be devoted to it by the students. Andover for a time, and perhaps other seminaries, came to have such a chair, but only of the relations of religion and science, and occupied probably by a clergyman of no scientific training. From other studies, Dr. G. F. Wright has been transferred to a similar chair in the theological department of Oberlin, and most appropriately, hav-

ing made original investigations in field geology. Divinity students, whether or not they have had a collegiate education, should be kept in sharp touch and practical sympathy with physical science, not apologetics alone, in order to get something of an inside view and to feel the force of natural fact, as well as to cultivate adamant accuracy. Loose ascertainment and statement of natural, mental, social, or celestial knowledge—for example, what we really know from the Bible of hades, or an intermediate state, or other than the spiritual features of heaven—are too common, especially overstatement; and we find the tendency so strong that even a biological investigator and the protagonist of agnosticism is loose in his language and in his “logicking,” as some one has termed a false or petty use of logic.

HUXLEY'S VERACITY.

On the same page with his claim for himself and fellows to veracity, he says of the devils entering the herd of swine, and of the blasted fig-tree, that these rest on the evidence of documents of unknown date and of unknown authorship—as if date (granted by most critics of all sorts) and the authorship, with sufficient approximation of the former and verification

of the latter, were not established by a multitude of very early witnesses who could and would have rejected the documents, if not authentic, as they did reject many documents of invalid authority, the apochryphal. Huxley's unqualified words imply that we are wholly at sea, altogether in the dark, about the date and authorship. He says a profession of belief on the evidence is immoral. If so, we have two immoralities—this, and his characterization of the New Testament documents; and which is the pardonable one it is not difficult to see. So, in the next paragraph, he characterizes orthodox Christianity since the second century as “that varying compound of some of the worst elements of Paganism and Judaism, molded in practice by the innate character of certain people of the western world.” Here is an indiscriminate and terrible charge, which scientific morality and accuracy ought to have guarded and made clear. The only light we get is in the context about miracles, and the contest of early Christianity with idolatry, and the present fetishism of the Roman populace, and images in the Roman churches. Apparently, he would spread the odium of fetishism over the orthodoxy of all Christendom, including the purest in English-speaking nations, if it so much as includes a faith in the trustworthiness of the Gospels. So

much for his scientific truthfulness. The rest of the essay is given to a discussion that relates to Murray's theory of coral-reef formation, to which the third bishop had referred; also to self-vindication in regard to Bathybius.

EGINHARD'S MIRACLE-WORKING RELICS.

The fifth essay, entitled "The Value of Witness to the Miraculous," is a long account of the stealing of relics of saints and the miracles worked by the relics in Germany, in the ninth century. It was derived from a printed copy from a manuscript copy dating within a century after the death of the author, Eginhard or Einhard by name, whose contemporary histories of Charlemagne and that time are here said to be regarded as trustworthy. Outside of the New Testament, Huxley does not doubt manuscript copies a century after the events; and he does not hesitate to speak of this man, living over a thousand years ago in the midst of the Dark Ages, and conniving at theft as an accessory after the fact, as "a witness whose character and competency are firmly established, and whose sincerity cannot be doubted," and contrasts him and his writings with Matthew, Mark, Luke, and John, and their Gospels; "all that we know of these persons," he recklessly says, "comes to nothing in compar-

ison with our knowledge of Eginhard ;” and he repeats his opinion about the authenticity of the Gospels. Certainly this is the height of impudence to set any man who is acknowledged to have been groping in the grossest mediæval superstitions and self-convicted of receiving and using relics that he knew were stolen from churches—to set him and our knowledge of him and his testimony above the apostles and their associates, trained by the purest teaching of Him who, according to Huxley himself and by common consent, is the Ideal Man, the embodiment of truth, and who were enduring all things in testimony of facts the truth of which they must have known, and which carried conviction to men of all classes, high or low, learned as well as unlearned, even the skeptical Greeks and worldly cosmopolitan Romans—that testimony which certainly had evidence enough to revolutionize the old Pagan world.

WERE THE JEWS CREDULOUS ?

“It cannot be pretended,” Huxley adds, “in the face of all evidence, that the Jews of the year 30 A.D., or thereabout, were less imbued with the belief in the supernatural than were the Franks of the year 800 A.D.” Yes, it can. The Jews were for the most part either utter formalists, the Pharisees, or utter skeptics, the

Sadducees ; and they scoffed at the miracles of Christ, even against the evidence of their senses. As Athanasius Coquerel well said in his reply to Strauss : “ It was, of all antiquity, the epoch that most resembles our nineteenth century—one of doubt, incredulity, and derision, of want of respect for all creeds, one wherein all was called in question, when the desire of innovation was general, and whose proper representative is Lucan, who has been styled the Voltaire of the Greeks. . . . That epoch is precisely the one in which, through the ever-advancing victorious arms of the Romans, the east and the west came most in contact ; and the spirit of Europe arrived to modify that of Asia, and to teach it to doubt, to believe only after inquiry, and to prefer facts to theories. . . . It was in unbelieving Europe that Christianity took root at once, and established itself in a decisive manner ; it was in the towns most polished, corrupt, and learned—Corinth, Athens, and Rome—that the Gospel found its first adherents, its earliest martyrs.” And he goes on to show that the ancient simplicity of the faith of the Israelites was gone, and the people were occupied with what was most positive in the world, namely, political interests. It was the time and scene where all nations mingled, and all the old was breaking up, and the Greek language and cul-

ture pervaded all, so that the Gospels even were written in Greek. Eginhard's narrative dates "about the year 830," and to put such a period as that of the apostles on a level or beneath the intellectually most stagnant one of the Middle Ages, when even the schoolmen (from 843 on) had not begun to illumine it—this goes well with the monstrous depreciation of the apostles in favor of the obscure, infatuated, and theft-approving Eginhard. And the essay fitly closes with an attempt, practically if not in so many words, to put George Fox and the apostle Paul on a level with Eginhard, in respect to superstition.

HUXLEY'S ORIGINALITY.

The sixth essay, on "Possibilities and Impossibilities," is a repetition with variations of the agnostic doctrine that everything is possible that is not contradictory in terms, however this or that may be improbable. In fact, this and all the succeeding essays are mainly repetitions of the preceding, with little or nothing new in substance, and the criticisms about discrepancies in the Gospels, as well as the arguments generally, are acknowledged to have no novelty. Huxley himself says, "I have been careful to explain that the arguments which I have used in the course of this

discussion are not new ; that they are historical and have nothing to do with what is commonly called science ; and that they are all, to the best of my belief, to be found in the works of theologians of repute" (p. 330). So the great prestige of this scientist has no weight in his Bible discussions, and these dwindle to rags of Strauss, Baur, Reuss, Volkmar, Renan, etc., who are more or less in discredit with many learned critics of all shades of opinion.

It would be tedious to go step by step through these remaining half-dozen papers. On almost every page there are the twists and contortions of fact, reason, and Scripture, which are always a good part of the stock in trade of objectors of every species, reminding one of the readiness which the little India-rubber faces, sold by curbstone peddlers, can by a slight twist or pinch be made ludicrous. This is the patent method of showing up orthodoxy ; and the flexibility of a Revelation in history, song, parable, epistle, for the masses as well as for the wise, one that is not cast in the iron of rigid logic and philosophy, and the ease with which even a philosophical theology drawn from that Revelation can be caricatured, render the method very available to an unlearned skeptic as well as to a Fellow of the Royal Society.

CHOOSES THE WORST INTERPRETATIONS.

These concluding six essays resolve themselves mostly into discussion of the case of the demons entering the herd of swine, hence the subject of demonology in general, and with it the attitude of agnosticism. It becomes more and more laughable--the manner in which the swine incident is brought up and with increasing frequency all through this volume until the last two essays, which are wholly given to it. Huxley, if not the swine, becomes thoroughly possessed, namely, with what he calls the "possessed pigs," the "bedeviled pigs," the "pig affair." It is plain that either he had taken no pains to look up the subject as variously understood and treated by the learned, or else he deliberately ignored all views and interpretations except the most objectionable. One of the two suppositions explains his usual style of treating the Bible, as in Genesis and elsewhere. Thus, in this volume he twice refers to the *Bene Elohim* (sons of God) of Gen. 6 : 2, as implicated in vicious "commerce" or "gallantries," and interprets it as between spirits and women. But this old Cabalistic and Gnostic notion, found in the apochryphal Book of Enoch, used by Milton, and poetized by Byron and Moore, makes up two and the worst interpre-

tations out of seven, the other five being reasonable and decent, and therefore would not have suited Huxley's purpose.

THE GADARENE DEMONIAK.

So here we have no hint of the variety of explanations offered by men high in learning and orthodoxy as well as by others. The Huxleyan conception of a passage of Scripture is sure to be the lowest one possible, and would probably take literally the entering of Satan (horns, hoofs, and all) into Judas "after the sop." The extreme view would be that a legion of devils had found their way into the Gadarene man, their presence making him a maniac; they were sent into the swine; the swine were thus crazed into drowning themselves; and, as they were valuable stock, belonging, as Huxley contends, to a Greek colony, the act, he thinks, was a very immoral one on the part of the Savior of mankind, if the narrative is at all trustworthy. The extremes of theory are this on the one hand, and, on the other, the purely figurative or accommodative, in regard alike to this and all the demoniacal possessions in the New Testament. It is enough to mention here only the intermediate view of Neander in his "Life of Christ," doubtless accepted by many, namely, that the demoniacs

were persons diseased physically or mentally, or both (so far a view agreeing with the physiological and pathological), but that supernatural influences of evil, implied in the Bible everywhere, had a point of contact with the soul, operating there through a general influence on the race, and especially on many individuals whose whole organization was deteriorated and unstrung by a life of uncleanness—the soul, he says, being “in itself supernatural in its hidden essence,” and in its relations with a spiritual world. In this Gadarene case the distracted maniac, believing himself torn by a host of demons, and speaking one moment in his own person and at another moment as if in theirs, was soothed by the compassionate presence and conversation of the Savior, of whom he may have had some knowledge as the great Physician of body and soul, though he was at first disturbed and averse on recognition; and the healing was so Divine and so far complete that he desired to remain with Christ. Whether there was a literal or an adaptive and spiritual meaning in the words “Come out of the man, thou unclean spirit,” and the word “Go,” and whether there was a literal entering of a legion of spirits into two thousand swine, are points where such men as Lardner, Paley, Newcome, Dean Milman, and others in orthodox ranks, have interpreted the case in the light of the

demoniac's conceptions and of the treatment adapted to these. Neander only says: "There is a gap here in our connection of the facts. Did Christ really participate in the opinions of the demoniac, or was it subsequently inferred, from the fact that the swine rushed down, that Christ had allowed the evil spirits to take possession of them? It is certain, at any rate, that they did cast themselves over the precipice into the sea, as if driven by an invisible power." On the main point, but on a high plane of exposition, Neander holds to the supernatural as involved in such cases.

THE DESTRUCTION OF THE SWINE.

As to the destruction of the swine, our view must depend on what we think of Christ. If he was but a man, and if he was responsible for the destruction, we must agree with Huxley. But, without the slightest infringement on the rules of morality, if Christ was the one God-man, with the spiritual salvation of men as his great mission on earth, and subordinately their temporal good, the case is wholly changed. As God, or representing God, he had the right of eminent domain over all things, the cattle upon a thousand hills, and their owners as well. And if the purpose in this case was Divine and humane, fulfilling his mission, what more is

there to say? A profound impression, as the narrative shows, was made upon the people, "the whole multitude of the country of the Gadarenes round about," and though at first it was dread of Christ, who shall say what the ultimate effect was when the man "went his way and published throughout the whole city, how great things Jesus had done unto him"? What was a herd of swine to the possible great benefit to the owners themselves? Of course if Christ had been a man only, without the sovereign authority and proprietorship of God represented in him, it would be inexcusably doing evil that good might come, though the evil was property loss and the good eternal gain. As for the man himself, very likely having a common superstition that the demons could only content themselves as inhabiting material bodies, the transfer he asked and its fulfillment, whether seeming or real, was a step in his psychical restoration without which he might have believed himself still haunted.

STRAUSS AND HUXLEY ON TRANSFER OF ILLS.

Strauss, a much bigger though bygone protagonist to whom Huxley defers, in a work on animal magnetism makes a curious comment on the Gadarene miracle: "Without believing in the reality of the demons, Weise is disposed

to admit the entrance of the disease into the herd of swine, and he refers to the authority of Kiesser, who grants the possibility of the demoniacal malady being transmitted to others, and even to animals. The devolution on animals of certain corporeal ills is manifested, as I know from sympathetic medicine. . . . In regard to the transfer to animals of the organo-physic condition of the human body, there is, I know, a foundation for it, inasmuch as horses and other animals are seen to participate in what is called the second-sight, a faculty possessed by some of the Scotch and Danes." This is a curiosity of literature as coming from the first great demolisher of the Gospels.

Huxley's transference of ills is of course mock-serious. Of this "Gadarene affair" he says: "There are physical things, such as *tæniæ* and *trichinæ*, which can be transferred from men to pigs and *vice versa*, and which do undoubtedly produce most diabolical and deadly effects on both; for anything I can absolutely prove to the contrary, there may be spiritual things capable of the same transmigration, with like effects." Another of his brilliant jokes, though in accordance with his assertion that miracles are only to be objected to as unproven, is his labored effort to show that five loaves might have grown, like vegetables, so as to feed five thousand. But he

says : " Proof must be given (1) of the weight of the loaves and fishes ; (2) of the distribution to 4,000 or 5,000 persons, without additional supply, of this quantity and quality of food ; (3) of the satisfaction of these people's appetites ; (4) of the weight and quality of the fragments," etc. This is interesting only as showing the man and his method in combating Scripture. What, in the past, could be verified after this fashion ? If he was the least bit serious in such stuff, " proof must be given " (1) of the exact condition of Huxley's brain at the time of writing it ; (2) of the width of his mouth ; (3) of the non-contraction of his risorius and zygomatic muscles ; (4) of the quiescence of his diaphragm. To know the truth about the battle of Waterloo, we must dig up and weigh the bones and dust of the slain, and must know the capacity of Napoleon's brandy-flask and how many centiliters of spirit remained in it when found, and the per cent. of strength, etc., etc. In the same line of humorous quasi-reasoning Huxley loses all respect for himself and his religious readers by arguing that the miraculous conception of Jesus by the Holy Spirit has an analogy in the parthenogenesis of insects. Such is the man who is looked up to as the protagonist in the struggle between truth and superstition.

BELIEF IN EVIL SPIRITS.

It is by no means the object of this and the preceding review to take in even summarily the great and manifold arguments for anything in the Bible, but only to show up and cursorily test some of the principal points made by the conspicuous man who assumes to speak adversely and at large in this field in the name of science. In respect to his long and repeated diatribes against the existence of a world of spiritual beings and influences, it would be enough to say that the almost universal belief in such beings and their influences and manifestations, from primitive down to the present time, is a great fact not to be snuffed out nor dismissed with a scientific sniff. Further, the fact that this belief has taken a thousand fantastic forms, among savages, or orientals, or mediæval priests and painters, or in recent spiritisms, is no argument against a real basis for it—no more than the fact that medicine has always run and still runs into absurd whimsies and practices, is a refutation of all medicine, or that the immense amount of obsolete or existing pseudo-science and scientific conjecture, and the protean changes of accepted scientific theory from day to day, are a reduction of science to absurdity. The most extravagant superstition may be the distorted

form of a truth. In the light of science, we came to laugh at astrology ; with further light, we find that the positions of the planets, as acting on the sun, may indirectly act upon our meteorological conditions and thus widely influence human affairs.

A POSSIBLE INDUCTIVE THEORY.

A large induction, when men of science learn to take in all human fact, may confirm the existence of invisible influences of evil, just as in the material world the perturbations of Uranus revealed a great unseen planet. If the natural evidence is only confirmatory of Scripture, not demonstrative, it may still yield a high probability, for example, that supernatural influences may be hypothesized to account for the unnatural enmity of many of the learned and ethically Christian toward a Revelation of God which they at times confess to be on the whole a vast blessing to man and a supreme marvel in history—the enmity becoming in them relentless and almost maniacal ; also, to account for the unnatural hatred of many, otherwise amiable and reasonable, toward an own child or parent, or others ; likewise, the unnatural delight of many well-trained, intelligent, and even refined persons in cruelty or foul wickedness, even in the most disgusting

crime against nature, as if for its own sake ; further, the diabolic fascinations and false lights with which sin deceives and mocks those who know better than to be misled by it ; still further, the vast and complicated systems of vice, wrong, oppression, and false religion, built up age after age by short-lived men looking only to self and the present, but as systems showing a far-reaching and all-embracing plan worthy of a master spirit of darkness—the most astonishing illustration being the long-elaborated and highly elaborated perversions of Christianity itself—the great gift of God to man for man's salvation. And perhaps it will be a part of some future great induction that Satan has succeeded in getting himself so horribly horned and hoofed, and so mixed up with wit and fable, as to make himself incredible.

ORIENTAL DUALISM.

Of course, Huxley, like all the rest of them, talks of the old Oriental dualism of a principle or deity of good and a principle or deity of evil. This has nothing whatever to do with the Bible, which represents the Adversary as a creature under the power of God, permitted to tempt those who, in yielding, are at least conjointly “drawn away of their own lusts and enticed.” As to the origin of evil, a disbeliever

is just as much bound to explain it as the believer. The Bible offers an explanation in speaking of pride as the condemnation of the devil—his original exalted position being his temptation, perhaps, as often happens with men, and freedom to choose being simply the ultimate fact. The odium of a dualistic principle, and of the origin of evil, as well as that of the exaggerated notions in the past of the power of the Adversary over nature, does not belong to the Bible—not even to the poetic Book of Job, where it is God putting forth his hand that qualifies the putting of Job in the Adversary's hand. Further, all the odium of every sort that pertains to savage or mediæval demonology, as a horror that has hung over the life of men, and the cruel atrocities attending a belief in witchcraft, have nothing to do with the question of the supernatural, howsoever largely they make up the coloring and incident in the history of man's extravagant and perverted imaginings, or features of his cruel and persecuting spirit in the past, exhibited in the social and political as well as in the religious domain. Huxley's whole treatment of the subject is narrow, unfair, and utterly unscientific, in the respects now mentioned. Besides, as already remarked, the spiritual world centers in God, and is involved in man's higher nature and immortality, as well as in

the nature and mission of the Redeemer, all which, rather than demonic incidents, are the great truths of Christianity.

HUXLEY'S GENERA AND SPECIES OF CHRISTIANITY.

As to Christianity, Huxley is or affects to be quite at loss to understand what it is, and speaks of the Christianity of this and that book of the New Testament as very different things, especially that of Peter and James as compared with that of Paul, and he makes out a list and table of the different genera and species of Christianity in the early Christian ages, as these were more or less affected by Judaism.

The only thing here of any pertinence whatever is the old discussion, emphasized by Baur sixty-four years ago, about the Pauline and Petrine points of view, never of any importance except as presenting some different sides of the same early Christianity. The misunderstandings of the relation between Christianity and Judaism, narrated in the book of Acts and the epistle to the Galatians, were temporary and soon resulted in harmony among the apostles. So far as the epistles of Peter and James offer evidence there is nothing at even seeming variance with Paul, except the well-known

condemnation of dead works by Paul and of dead faith by James, not in the least contradictory. In fact, in James' epistle we distinctly find the great Pauline doctrines of Christian liberty and justification by faith, and in Peter's the same non-Judaistic doctrine of liberty and also of Christians as a holy priesthood, offering up spiritual sacrifices (another favorite Pauline doctrine), and a recognition of Paul by name, his writings as good Scripture, the perversion of them as the thing objectionable, and his good work in establishing those addressed in "the true grace of God wherein ye stand." Huxley makes the Christianity of Peter and James simply Judaism plus Christ as Messiah.*

* On one page he will have it that the final command, "Go ye, therefore, and make disciples of all nations," is spurious because he thinks that Peter, John, and Paul could not have known of such a command, else they would have appealed to it on the Gentile question; but, in a note on another page, he shows that the command did not necessarily affect that question; he quotes Dr. Newman approvingly, to the effect that Peter and the Jerusalem Christians might have interpreted the words to mean the propagation of Judaistic Christianity. So, also, he argues against the genuineness of the Sermon on the Mount because it says that every jot and tittle of the law must be fulfilled, a saying that he thinks, if authentic, would have been appealed to by Peter and John as justifying the Judaism he attributes to them even after they were further enlightened. But how "fulfilled?" The meaning he puts on the words is

There is not a particle of "Judaizing" in the three epistles, and, as every docile and intelligent reader of the New Testament knows, its Christianity is substantially one throughout, including the "Johannean" (John's), which gives it more especially from the contemplative side of inner philosophy and exalted spiritual experience, as Peter and James chiefly present it from the practical side, and Paul from the systematic and every side.

WHO ARE BIBLICAL SCHOLARS?

What is the great requisite of a Biblical scholar, in order that he may be trustworthy? According to Huxley it is that he be a German or a Hollander, for in no English-speaking country, at least, can a critic be supposed to be independent. Granting this absurdity, how about eminent German scholars who find reason to hold to the integrity of the Bible and little or no reason to adopt the results of their destructive brethren?

WITNESS TO THE MIRACULOUS.

The essays return to the subject of miracles. And what are requisites of a trustworthy wit-

gratuitous and inconsistent with other teachings of Christ and the New Testament. This is science.

ness to the miraculous? According to Huxley, "neither considerable intellectual ability, nor undoubted honesty, nor proved faithfulness as civil historians, nor profound piety." (He has Eginhard here in mind, who, he assumes, had all these virtues, though this man connived at theft and his profound piety was apparently profound superstition.) The one requisite is that the witnesses must not have a belief in the miraculous. But suppose they come to have it, against preconceptions, by positive ocular proof? And how about having an utter disbelief in it, like Huxley's? Would that be a good qualification—a freedom from "presupposition of observation and reasonings"? There are those of whom it may be said now as of yore, "neither will they be persuaded though one rose from the dead." As a fact, there were multitudes in the time of Christ and his apostles who, so far from expecting and eagerly accepting wonders, as in the case of Eginhard, were confounded by the Christian miracles, and the scoffing witnesses were forced to admit the reality while they attributed it to magic or Satan.

The subject is a large one and has often been treated in full, more particularly with reference to the distinctive justifying purpose in the first promulgation of Christianity. Enough that false miracles in all ages are a temptation to

disbelieve, but do not disprove the worthy and well-attested that bore witness to the Divine mission of Christ and his apostles, before the greatest of all miracles came to pass, acknowledged by Huxley and all, namely, the prevalence and power of the Gospel over the old pagan world and over all potencies down to our day—including also its reforming, enlightening, and saving power, which the disbeliever does not feel nor acknowledge, but which for ages has been manifested and to-day is as manifest and mighty in all ranks of society as ever, rendering a repetition of miracles as unnecessary now as at any time since the first ascendancy of Christianity.

NO WITNESSES TO BE ACCEPTED.

Notwithstanding these and many other weighty considerations, Huxley won't accept any witnesses, any proof. Believing *à priori* that any miracle is possible, he decides that a miracle itself discredits any witness; in short, there never can be any proof of a miracle; it is too absurd anyhow, though conceivable and possible! He says: "I repeat what I have already more than once said, that the age and authorship of the Gospels has not, in my judgment, the importance which is so commonly assigned to it [he has himself been battling

this age and authority all along]; for the simple reason that the reports, even of eye-witnesses, would not suffice to justify belief in a large and essential part of their contents; on the contrary, these reports would discredit the witnesses." He refers, as everywhere, to the Gadarene miracle for example and as something extremely improbable; and he goes on to hedge himself digressively by trying to show that there is too much likeness and too much unlikeness in the three synoptic narratives. But his dictum stands: their reports of a miracle would discredit the eye-witnesses. On this principle there can be no admissible testimony to anything beyond the ordinary observed course of things, even though this be but the past causeless sequence he makes it. The King of Siam was quite right in denying that water can be converted into a solid, called ice; the persons who reported it to him, by that very report, were self-evidently lacking in "their capacity as observers and as interpreters of their observations." Huxley's position amounts to Hume's great objection to miracles, which Huxley elsewhere rightly condemns as begging the question.

HUXLEY'S SCIENCE.

Such is Huxley's "Science and Christian Tradition," which, taken piecemeal or all to-

gether, is neither science nor even Huxley's science, but a revamping of others' criticisms, as he confessed in order to give the criticisms some show of weight and authority. He remarks that "the men who make epochs, and are the real architects of exact knowledge [exact should apply only to the mathematical sciences], are those who introduce fruitful ideas and methods." Huxley, by the way, was not in this or any respect an epoch-making man, even in natural science, notwithstanding his many researches in biology. He proceeds: "As a rule the man who does this pushes his idea, or his method, too far; or, if he does not, his school is sure to do so." In this he refers to Strauss, Reuss, and the other negative critics. Precisely so. And, in Huxley's highly peppered ragout of their extravagant criticisms, we have a cheap hash of odds and ends, whereas we came to his table expecting a good English roast of Royal Society science, the *pièce de résistance* that would challenge carving-knife, teeth, and stomach to do their utmost.

THE APOCALYPSE.

Reaching the end of his poor feast, it is noticeable that he makes slight reference to the end of the New Testament, where the seer looks forward to all coming time, as the first

chapter of the Bible looked back to the beginning, which was largely discussed by our author. But his little reference is sufficiently contemptuous, as might be anticipated; and a vindication of the last book of the Bible from so contemptuous a dismissal calls for somewhat extended remark. Speaking of geological catastrophes in the second essay, he says it is conceivable that "the earth [should] become a scene of horror which even the lurid fancy of the Apocalypse would fail to portray," and adds, "if a sober scientific thinker is inclined to put little faith in the wild vaticinations of universal ruin which, in a less saintly person than the seer of Patmos, might seem to be dictated by the fury of a revengeful fanatic," etc.

THE EARTH'S DESTRUCTION.

There is nothing that refers to either sidereal or telluric ruin in the Apocalypse. In the various plausible interpretations of it, there is a general understanding that it is a picture of human history, prophetically, and has nothing to do with cosmical catastrophes, except it be in the sequel of a new heavens and new earth, a phrase apparently derived from Isaiah, and used by him in reference to a social and spiritual order of things—this consideration also favoring the figurative interpretation of II

Peter ch. 3, adopted by some of the great men in orthodox ranks in all ages and rejected by others. There, in Peter's epistle, is the only seemingly literal prediction of the destruction of the earth, or at least by fire ; and, though that epistle is the only one that was particularly questioned in patristic times, and was queried even by Calvin and Luther, it is well to recollect (what no one appears to have noticed in this connection) that science has of late years made the frightful discovery that the spectrum of a number of comets agrees with that of incandescent carbon ; and, if the substance be that, in that condition, and should mix with the earth's atmosphere, the result would precisely and literally fulfill the words of Peter, "the heavens being on fire shall be dissolved" (*ouranoi*, here the skies, the air). All would go in one grand conflagration. But such a catastrophe, flashing the vital oxygen of the air into deadly carbon dioxide, would leave the earth forever uninhabitable ; and this consideration and the whole chapter and Bible favor "the day of the Lord" and "his coming" as not referring to a material destruction and a personal reign on a renovated earth, but as figurative of great historical judgments only, and a social and religious renovation, according to Biblical usage.

THE DAY OF THE LORD.

The day of the Lord, distinctly in a moral and spiritual sense, we find in the last chapter of the Old Testament, where a literalist would certainly think that he finds a destruction by fire. "For behold, the day cometh, that shall burn as an oven; and all the proud, yea, all that do wickedly, shall be stubble: and the day that cometh shall burn them up, saith the Lord of hosts, that it shall leave them neither root nor branch. But unto you that fear my name shall the sun of righteousness arise with healing in his wings; and ye shall go forth, and grow up as calves of the stall. And ye shall tread down the wicked; for they shall be ashes under the soles of your feet in the day that I shall do this, saith the Lord of Hosts. . . . Behold, I will send you Elijah the prophet before the coming of the great and dreadful day of the Lord: and he shall turn the heart of the fathers to the children," etc. The key of this is in the Gospels. "And Jesus answered and said unto them, Elias truly shall first come and restore all things. But I say unto you, that Elias is come already, and they knew him not, but have done unto him whatsoever they listed. . . . Then the disciples understood that he spake unto them of John the Baptist" (Matt. 17 : 11-13), who came

“before him in the spirit and power of Elias, to turn the hearts of the fathers to the children, and the disobedient to the wisdom of the just; to make ready a people prepared for the Lord” (Luke 1 : 17). The great and dreadful day of the Lord, dreadful to the systems of wickedness, was the rising and power of the sun of righteousness, Christ, consuming evil in the earth while bringing healing and growth to those who are quickened by his light and warmth.

THE COMING OF CHRIST AND THE NEW EARTH.

As further preface to the last chapters of Revelation, which round out the great series of inspirations that began with the first chapter of Genesis, we may notice that Peter himself on the day of Pentecost, said “this is that which was spoken of by the prophet Joel,” quoting the prophet’s words which include “I will show wonders in heaven above, and signs in the earth beneath; blood, and fire, and vapor of smoke; the sun shall be turned into darkness, and the moon into blood, before that great and notable day of the Lord come” (Acts 2 : 19-20)—the day of the Lord and preceding wonders agreeing with similar language used by our Savior, as marking “the Son of Man coming in the clouds of heaven with power and great

glory," "immediately after the tribulation of those days," the fall of Jerusalem and end of the Old Testament economy, when the Roman eagles gathered together ; and this followed by the great separation under the Christian dispensation of the sheep from the goats, "when the Son of Man shall come in his glory and all his holy angels with him" (Matt. 24 and 25). And in Matt. 16, speaking of the coming of the Son of Man in the glory of the Father with his angels, he said, "Verily I say unto you, there be some standing here which shall not taste of death, till they see the Son of Man coming in his kingdom." It was the utter fall of the old economy and the complete installation of the new. The coming and the new heavens and earth are the new Christian order ; and whether any of the apostles and disciples, after that new order began to develop itself, were looking for a literal and speedy second Advent, and, if so, whether it was a permitted and salutary mistake in the first three trying centuries, as Gibbon thinks it was, is too extensive a subject to enter upon here. Enough that the Redeemer certainly did not fall into nor justify a "prodigious error" that Huxley conditionally ascribes to him in this regard. The catastrophic language of the apostles, as well as of their master, has been defended as a wise veiling of all that bore relation to social

and political changes—wise and even necessary in those times ; however this may be, it was the prophetic style of the Bible.

THE CHRISTIAN ERA PREFIGURED.

Good commentators have found striking correspondence between the sublime symbolical scenes of the Apocalypse and certain great events of history, especially as given in Gibbon's "Decline and Fall of the Roman Empire"—an empire that in the apostle's day, as related to Christianity, was the most pressing subject for grand apocalyptic vision. But, whatever explanation may be given of the succession of seals, trumpets, and vials, and other imagery, the "new heaven and new earth" must be interpreted in the light of Biblical usage of the phrase above mentioned. And the Divine prophetic inspiration of the Apocalypse—no matter who was the author of the book nor in what early century it was written—is confirmed even in a single verse of a short chapter, the twentieth, preceding the new earth or order of things in the last two chapters. The seemingly far-fetched "Gog and Magog" could not have been brought in at random to represent any hostile power, and there is no apparent reason for bringing in here the substance of Ezekiel's thirty-eighth and thirty-

ninth chapters unless there was identity of the militant forces there named and described too clearly to be mistaken, including these two and other ethnic names. In fact, Gog and Magog are perfectly well known to phrase the ancient tribes north of the Caucasus and north and east of the Caspian, whose early inroads west and south culminated finally in the great irruption of Tartars and Turks, combined with other Mohammedans from every quarter, that reached and conquered Constantinople in 1453, and blotted out full half of Christendom, then extending around the Mediterranean.

That particular date is not essential here, though it strikingly connects itself with the work and code of Theodosius II (died 450), which soon after his death finished the overthrow of Paganism in the Roman Empire, thus giving the "thousand years" before the great new irruption of antichristian forces. Any particular stages of the overthrow and of the irruption can be selected, but the great two-fold fact remains. Indeed, Gibbon relates that the great Mohammedan onset was understood by Christians at the time as fulfilling this part of the Apocalypse. With acceptance of the revelator's own words in this chapter for a standing-place in interpretation, a studious inquirer can satisfy himself by a multitude of

details in this and other prophecies, and in history, that this concluding book of the Bible stamps the final seal of Divine inspiration on its pages.

The objector must explain away this prophetic vision that foresaw the earth's future, as well as the vision that in Genesis went back to the beginning; and it must be no sham refutation, like that of Huxley and others in respect to the Biblical account of creation, nor must it be only a sneer about "wild vaticinations" like a "vengeful fanatic's." It must show that the Apocalypse of Christianity is not, as it has been throughout shown to be by able students, a magnificent prefiguration of the greatest events and powers of the world, as related to the actual history of Christianity, especially its two great conflicts with anti-christian forces, down to the time when the holy city, the new Christian organization of the world, may be considered as having been established in its true glory forever on earth—an "everlasting kingdom," not doomed to fall as Huxley says of New Testament Christianity, still less by blows such as his, nor, on the other hand, transferable to the heavenly world, as some of our commentators would have it, thus perverting the last three chapters of the Bible to a miserable misapprehension of the whole subject alike in the minds of

believers and unbelievers.* In every verse of the three final chapters the scene is earth, to the end.

Of course the glorious city, and all the

* Archbishop Usher, Dr. John Lightfoot, and François Turretin are among those who were free from the modern perversions of Rev. 20. The prevailing error is failure to refer verse 2 directly to antichristian powers on earth, whatever supernatural influence may be understood as implied; and, in accordance with this, a failure to interpret verse 3 as meaning a restriction of such forces within bounds, beyond Christendom. Verse 4 admits of two interpretations, of which one is that which relates to the honor and influence in succeeding ages of the martyrs of the first centuries; and, on this view, verse 5 would relate to the revival and worship of pagan classicism. Especially is the very symbolic character of the Apocalypse overlooked in accepting two literal resurrections here, and far apart. The word in this place is manifestly figurative. In general, it is to be considered that the overthrow of the paganism of the then civilized world, and the temporary great inroad that threatened all Christendom subsequently, were fitly the great subjects of prophecy here, for the comfort and strengthening of the persecuted then, and of Christians some centuries later. The last five verses may be construed as a figurative description of a great judgment ever going on, including the opening up of the records of the past, all judged more and more in the light of the now open Bible, "the book of life." As to the last two chapters, why wrest and wrench the Scripture by transferring them to heaven?

blessed scene in the last two chapters, are comparative—the terrible first centuries of struggle throwing the subsequent triumphs and blessings into dazzling light. There has been plenty of evil all along. The seer, if it had been within the scope of the visions, might have presented another loosing of another kind of Satan, for example, less than half a millenium after 1453—not the irruption of Asiatic Gog and Magog on Christendom, but of a good part of Christendom on all heathendom (even on half-Christianized Madagascar), in seizures, outrages, wars, conquests, under the plea of establishing protectorates. But the holy city of righteousness and peace did not descend all at once; John saw it “coming down,” and it is ever coming and brightening, more and more.

HUXLEYAN PRAISE OF CHRISTIANITY.

The Huxleyan derision is mingled here and there with further praise of Christianity, as “that ideal of manhood, with its strength and its patience, its justice and its pity for human frailty, its helpfulness to the extremity of self-sacrifice, its ethical purity and nobility, which apostles have pictured [in books to be rejected as unauthentic?], in which armies of martyrs have placed their unshakable faith, and whence

obscure men and women, like Catherine of Sienna and John Knox, have derived the courage to rebuke popes and kings" [John Knox obscure?]; but in the same paragraph he says: "Critical science is remorselessly destroying the historical foundations of the noblest ideal of humanity which mankind have yet worshiped." Remorselessly, no doubt, but the destroying doubtful, if that is to be done by these and similar "scientific criticisms," beating like frothy waves against the Rock of Ages.

Argumentation of all sorts will go on, but argumentation pro or con settles nothing for one who either never comes, or who once for all has come, into the full light of God and of God in Christ. Until then the religiously instructed, as Huxley says he was, may be at best in uncertain twilight; and, until then, the religiously self-consecrated may be in the shadow of Mount Sinai, ruled chiefly by conscience and yielding but a half-hearted service. But when one emerges fully into the light and liberty of the Gospel, the New Testament becomes a new book, full of triumphant assurance and jubilant gladness and supernal beauty; all is then clear forever, and all nature and the Word shine with Divine glory inexpressible. Much the same consciousness of illumination, though it be a cold uncanny light, is true of many of those who are in the eclipse of faith,

as some of us know by our own past experience—impressing one of the lessons of Christ, “Take heed that the light which is within thee be not darkness.” And if one is looking about for a better than Christ’s gospel, agnostic or other, and perhaps has followed for a time one or another of the famous false lights who have blazed out and flickered out successively even in our lifetime, he may find that the experiment or search gives new force to the words of Simon Peter—“Lord, to whom shall we go? thou hast the words of eternal life.” There is but one Gospel and one Christ, after all.

On Huxley’s tombstone is said to be inscribed the following lines, most fitly expressing his forlorn agnostic gospel, with an inconsistent and sentimental reference to the God of whom he professed to know nothing :

“ And if there be no meeting past the grave,
If all is darkness, silence, yet ’tis rest.
Be not afraid, ye waiting hearts that weep,
For God still giveth his beloved sleep,
And if an endless sleep he wills so best.”

That is all—the rest and sleep of nothingness!—and granted by God to his beloved as perhaps the best thing for them—the beloved of Him including those who in denying the Son deny the Father also. Not so Christian-

ity. "Beloved, now are we the sons of God, and it doth not yet appear what we shall be, but we know that when he shall appear we shall be like him, for we shall see him as he is." "For if we believe that Jesus died and rose again, even so them also which sleep in Jesus will God bring with him."

III.

FALSE REVELATIONS OF THE
UNSEEN.

Huxley avers that religions, including the Christian, alike consist of information about a world of spirits, with some ethical concomitants. Let us see.

In everything the false exhibits its nature when placed beside the true, and the truth shines forth in the contrast. The triviality of spurious disclosures of the unseen world has been remarked ; the comparative silence of the Bible on the subject has been a matter of comment. But we may find untrodden ground, and a fresh argument for that inspired volume, by passing in rapid review some of the pseudo-revelations of various dates and both hemispheres. We shall find a singular family likeness in them ; and the features are not only triviality, luxurious imagery, more or less of Munchausen exaggeration, and in general an effort to humor curiosity by a display of overwise information, but also an assumption of much exact knowledge, even to the extreme of abundant and precise arithmetical statement,

For this article, the available sources are the Talmud (epitomized in *Blackwood*, 1832-33), the apocryphal gospels, and writings of Mohammed, Swedenborg, the Shakers, Mormons, and Spiritists.

It will be shown that these teachings are in extreme contrast with the Holy Scriptures—as extreme as that of the Bible cosmogony with the fantastic myths of the creation that are found in other ancient records. How is it that this one book is so strange an exception? How is it that the New Testament is a lofty exception to the writings, claiming high authority, that were composed in the same age, in the same region, even by men of the same nation? The truth is, uninspired man, assuming to put forth celestial revelations, can never, in any age, resist the temptation to tell all about heaven and hell, and make a vain show of the knowledge. Every such delusion or imposture descends to the most trifling, if not absurd, details—is very particular in letting us know the place, number, size, and shape of the invisible worlds and their inhabitants, and is self-complacent in this display of minute information on so occult a subject.

First, the rabbinical scriptures—a mass of traditions, mostly reduced to writing or collected in the first three centuries of the Christian era, and claimed to be of more value than even

the books of Moses. The traditions contain much that is wise, sublime, and beautiful, but much also that illustrates the vast difference between man's invention and God's word. They tell us, exactly, that there are seven heavens and seven hells. The heavens are each twelve times ten thousand miles square. The materials, furniture, and occupants of each are described; for example, in the fifth heaven or house, where Elijah dwells, are couches of scarlet and blue, woven by Eve herself. At the gates of paradise stand sixty times ten thousand spirits; they receive the soul of a righteous man; they lead him to four springs of water, margined with eight hundred species of roses and myrrh; and from these springs flow four rivers of milk, wine, honey, and balsam. In the first three hours of immortality, every righteous soul is an infant, and dwells in a celestial nursery; in the next three hours, is a youth, and mingles with youthful pastimes; in the third watch, arrives at manhood. Among the wonders of paradise is the phoenix, a bird as large as a mountain and bright as the sun. Of the tree of life, it is said that its fruits have five hundred flavors. The Talmud is very wise, too, concerning good and evil angels. Every rabbi on earth is so infested with evil spirits that there are constantly a thousand on his right side, and ten times as many on his left.

If a man is not cautious how he opens his eyes, there are some who will even be sure to get between the lids. Enough. The New Testament, so far from dealing in such fables, warned Jew and Gentile against them.

Of the apocryphal gospels, one of the least objectionable is that of Nicodemus, otherwise called the Acts of Pontius Pilate; yet the unknown author, like every other writer of spurious revelations, cannot resist the temptation to tell us much about the unseen world and its transactions. More than a quarter of the document, which is of the average length of the canonical Gospels, is given to an elaborate description of our Lord's descent into hades after his crucifixion. First, in the blackness of darkness there appeared the color of the sun, like gold, and a substantial purple-colored light. Then we are told what the spirits of Adam, Isaiah, Simeon, and John the Baptist said about the light. There is a long quarrel between Satan and the prince of hell concerning the expected arrival. Next, this prince is commanded to shut the gates of brass against the Lord; the saints interfere; confusion ensues; the Lord bursts open the gates; he tramples on death, terrifies the devils, gives the prince of hell dominion over Satan in exchange for that over saints, takes Adam by the hand, and, the rest joining hands, all as-

cent to paradise. In one part of the account the particulars are given of the sojourn of Lazarus in hades, and how he escaped—a tale in striking contrast with the silence of the Gospels in respect to the experience of this Lazarus while dead. The Gospel of Nicodemus sets forth nothing of this as a parable, like that of the other Lazarus, but as fact, as history. It assures us that these transactions were copied from the record of two persons who rose from the dead, and that their accounts, written separately, agreed in every word and letter. The other pseudo-Gospels, which, unlike that named after Nicodemus, descend to groveling puerilities, are largely taken up with the particulars of angelic appearances. The religious literature of those centuries is as a tropical swamp of fancy or folly; while far above it, in the very midst of it, soars the mountain-like word of God, solid and clear in its spiritual dignity, and solemn in its silence respecting the particulars of a future state.

The Koran of Mohammed is marked by the same distinguishing spots of a spurious revelation of the unseen. It panders to curiosity and runs into trivial minutiae and numerical statements. It describes the gardens of paradise, the couches with linings of thick silk, interwoven with gold, the green cushions, and

beautiful carpets. Every believer will feast from three hundred dishes of gold and will have eighty thousand servants. Spirits, genii, angels, are portrayed as distinctly as Agassiz delineated the tribes of fishes and polyps. The tree of happiness in paradise bears whatever one may wish : horses, ready saddled and bridled, and garments will burst forth from its fruits, if desired. If our Holy Scriptures had been written by other persons than Oriental, it would still be a wonder that they are at the furthest pole from all this tissue of nonsense. But, when we consider that the fiery and fanciful Asiatic mind, so soon as it turns to invisible things, flies off into a blaze of extravagances as certainly as a rocket, it is amazing that the Bible is what it is, unless it was inspired and superintended by the Divine Spirit.

The curiously statistical turn of false revelations might be illustrated here by a document printed at Rome, by "superior permission," but not now at hand for quotation. It assumes to be an answer from Christ himself to a prayer ; and it tells the precise number of drops that fell from beneath the crown of thorns, and the number of sighs and groans that were breathed out on the cross. But we pass to more modern disclosures of the unseen.

Swedenborg, in his "Heaven and Hell," deals with the invisible. He informs us that

there are three heavens, and how they are constructed ; also, what class of persons dwell in each quarter—north, east, west, and south. The angels dwell in houses like ours on earth, but more beautiful ; there are parlors and chambers in great numbers ; there are courts, gardens, and shrubberies. Palaces there are, with gardens, on the “south side,” glittering with silver leaves. The most intelligent of the angels have garments as of flame or light ; the less intelligent have white robes without splendor ; those still less so are dressed in divers colors. Swedenborg had seen mountains in the other world taken possession of by evil spirits, but shaken and overturned by the mere look and will of an angel ; he had seen a hundred thousand of the evil dispersed and cast into hell by the same means. The greatest power resides in those angels who constitute the arms of Heaven, for all Heaven is in the form of a man, and every single part of it is in that form. Such are samples of the information given.

Of the more local and limited forms of pseudo-revelation, that of Shakerism may be taken as a specimen. One of its followers, F. W. Evans, gave a “Compendium” of it some years since. From this it appears that there are four heavens and hells, divided among antediluvians, Jews, Christians—the

fourth, however, being now in preparation. Mother Ann Lee, under whose teachings the system took its present shape, was favored with revelations: she looked into the windows of heaven and saw the angels; she saw Ezekiel Goodrich flying from one heaven to another; she saw Jane in the world of spirits, praising God in the dance; she saw Jonathan Wood among the dead, and he was like claps of thunder among them, waking them up; and she heard Ezekiel Goodrich's voice roar from one prison to another, preaching to the dead.

The Mormons profess to be materialists and adventists; they mostly confine their ideas to earth as enjoyed both now and in the future. In view of this it is the more remarkable that, in the little their prophets say concerning invisible things, there are the inevitable spots of spurious disclosure; there is a disposition to be very wise and statistical in respect to the unseen. Joseph Smith declared that he had seen heaven and hell. One of his apostles gives the names of ten demons, such as "Kite, Kilo, Kelo," etc.; some of these are presidents over seventies in hell, and have six counselors each. This person claims to have cast out just three hundred and nineteen demons on one occasion from one individual.* The Mormons

* The Mormons, or Latter-Day Saints. London, 1852.

make it a reproach, rather than a merit, of ordinary Christian faith that it is not over-wise as to heaven. One of their hymns has these lines :

“ The heaven of sectarians is not the heaven for me,
So doubtful its location, neither on land nor sea.”

Modern Spiritism, with all its affectation of high-sounding philosophy, has the precise characteristics of all the delusions now mentioned—the same vainglorious conceit of occult knowledge, and the same frivolous particularity of statement. Like the rabbin and the Mohammedan, the Spiritist believes in seven heavens. And as the rabbin informs us that the houses of heaven are twelve times ten thousand miles square, and the Mohammedan teaches that every believer will have a farm a thousand days' journey in extent, so Andrew Jackson Davis, in his “Present Age,” tells us to multiply our earth by twenty-seven million times its present size, and it will give you the exact extent of one of the countless parks of the second sphere. He locates the second sphere as encircling the Milky Way, and describes its mountains, shrubbery, and ten thousand varieties of flowers. Each hemisphere of this sphere is divided into six different societies. In the first are negroes, Indians, idiots, and criminals ;

and, strange to say, on another page it appears that this is the heaven also of an immense number of infants.* Davis once saw a congress of thousands of spirits seated "thirty miles" up in the air, "a little east of Boston." In the Mohammedan heaven there is a tree that bears horses, ready saddled and bridled; in the Spiritist heaven, according to a published communication from the other world, a young lady has her piano, and rides out every day on a pony.

Every careful and candid reader of the Bible must feel that, in the respects mentioned in this article, that book is as far from these follies as the east is from the west, as heaven is from earth. How simple and spiritual, how dignified and divine, how high and holy, does it shine forth in the contrast! How is it that it is so singular an exception, under the great universal temptation to give loose rein to fancy and vainglory in speaking of invisible things?

Before coming to the New Testament, which exhibits this contrast in the strongest light, brief reference may be made to the Old Testament. The careless reader may mistake some of its passages as comparable with the false revelations. It will be found, however, that they all are visions *on* the earth, not of heaven, and are manifestly symbolic—not given

* Cf. pp. 215, 218 (ed. 1853).

as literal, eternal realities. They do not assume to remove the veil between us and the celestial, but rather are embroiderings of the veil. Such are the visions at the ascent of Elijah and to the servant of Elisha, and the highly figurative visions of Isaiah, Ezekiel, Daniel, and Zechariah. The appearances of angels, likewise, are on the earth, not an unfolding of the scenes of another world.

The same is true of everything that may be adduced for comparison from the New Testament, except it be the simple affirmation that the first martyr, looking steadfastly into heaven, saw the glory of God and Jesus standing on the right hand of God ; and the brief assurance that there are " many mansions," the meaning of which is not explained, and, no less enigmatic, that there is a " spiritual body." The Revelation of John, from which enthusiasts and impostors have doubtless drawn some of their coloring, is no exception. It was a revelation of events to come to pass on earth ; it is not a revelation of the next life. The very verse which speaks of a door opened in heaven explains what follows as things which must be hereafter ; it introduces a series of symbols too bold, too earthly, to have been intended for heaven itself, and all are connected with a series of crises on earth. Moreover, here and there, the heaven spoken of—a wonder in

heaven, a sign in heaven, and the like—evidently locates the visions as beheld in the visible heavens, not the invisible and spiritual. And when we come to the new Jerusalem, which, like other parts of this book of John, has by mere accommodation furnished much of the celestial imagery used by Christians, and perhaps, in its enumerations and measurements, suggested by perversion the arithmetical vagaries of fanatics who assume to describe heaven, we find that it is not heaven, but a city—a new order of things—descending to earth, to be realized on earth; “and they shall bring the glory and honor of the nations into it,” as already has largely come to pass. In fine, in the words of the last chapter, “The Lord God of the holy prophets sent his angel to show unto his servants the things which must shortly be done.” This was the purpose.

The true position of the New Testament on this subject cannot better be illustrated than in II Cor. 12: 2-5, and the context. Here, in brief space, are no less than eight marks of the great modesty and moderation of the sacred writers when speaking in sober prose of the hidden things of the future world. First, Paul had apparently kept secret during fourteen years the fact of a wonderful trance, granted, no doubt, to strengthen him for his extraordinary trials. Secondly, he now speaks of it

only because forced to assert his claims as superior to those of certain false apostles. Thirdly, he avoids the use of the word "I," only saying, "I knew a man" who had the vision. Fourthly, he assumes no undue knowledge, but repeats the disclaimer, "whether in the body or out of the body, I know not; God knoweth." Fifthly, he reveals absolutely nothing of what he saw; in the expression "third heaven," he probably spoke only after the manner of the Jews, to whom the first heaven was the cloud region, the second the starry, the third the unseen world. Sixthly, so far from disclosing anything, he declares that what he learned is "unspeakable"—"not lawful for man to utter." Seventhly, he acknowledges a sore affliction, imposed lest he should be vain of the heavenly trance, thus teaching that God does not regard such rare revelations as things to be boastingly trumpeted abroad. Eighthly, he expressly says that, while he might make much of the trance if it were another man's, "yet of myself I will not glory, but in my infirmities."

Elsewhere the apostle Paul writes: "Now we see through a glass, darkly; but then face to face: now I know in part; but then shall I know even as also I am known." And similarly writes the apostle John, the author of the book of Revelation itself: "Now are we the sons of

God, and it doth not yet appear what we shall be; but we know that when he shall appear, we shall be like him."

Why is the Bible so silent in respect to the physical aspects and the affairs of heaven? First, it may be because heaven does not essentially consist of outward glories; its foretastes here are not of palaces and gardens, but in moral and spiritual experiences. Secondly, it may be because much of the reality of heaven is unspeakable, transcending our words and ideas, as Paul intimates. Thirdly, if anything could be communicated to us, it may be withheld because description, in our human language, would belittle and render trite, whereas the slight hints of the Bible suggest untold glory. Fourthly, a fuller revelation of heaven might distract our thoughts from practical duty, and turn our attention from the great moral truths of existence, the substance of heaven and hell—above all, from the Lord Jesus Christ as the great object of wonder, hope, and desire. Any revelation that occupies itself with the number, size, shape, location, scenery, and transactions of the unseen worlds—with else than him who is the All in All—is evidently not of God. All these spurious visions bring a hundred vain and childish things between us and God. They are busy with the "spirits and the splendors, the palace,

gilding, and thousands of liveried servants," forgetting the King who is within, all-glorious—not seeking to find him and come even to his seat.

“Let no man beguile you of your reward in a voluntary humility and worshiping of angels, intruding into those things which he hath not seen, vainly puffed up by his fleshly mind, and not holding the Head,” namely, Christ. And let no one beguile us with the idea that a book so unlike all pretended revelations in every age and land, so reticent, lofty, and spiritual, while they are so like each other in folly, is not more than human—is not divine.

IV.

ARGUMENTS FOR THE UNSEEN.

In all the agnostic talk of a lack of evidence of an unseen spiritual world, as the only argument against it, it is plain enough that the seeming remoteness of such a world from hard matter-of-fact scientific pursuits, and from our daily humdrum life, is a background of the unbelief. It needs, therefore, to be brought near in the light of facts.

The Bible, unlike many pretended revelations, confines itself to the moral facts of the unseen world; as to other facts, it discloses hardly anything except that there is a spiritual body. It often implies, however, that the inhabitants of that world were in ready communication with earth, especially in the early stages of divine revelation, and, later, in connection with the appearing and work of Christ; and this implication favors an inference that we are surrounded by an invisible world.

The present purpose is to state and illustrate anew and briefly some arguments for such a scene of existence, in the light of comparatively recent facts, experiments, and calcula-

tions. At first glance, how strange, in the midst of our commonplace life, seem the wonderful appearances at the birth, transfiguration, and resurrection of our Lord! How strange, in the cold light of modern science, and under the stony eye of materialism! But what if the celestial incidents comport with some current and familiar facts of life and death, and with an increasing tendency of science itself to make everything of the invisible, nothing of the visible?

Without touching on the many debatable phenomena that come under the discussion of the old psychology and the new so-called psychical research, and without giving any credence to the claims of modern spiritism, we may first consider a class of facts that are too much slighted, though known directly or indirectly to almost every person. It is that, by no means rarely, the dying seem to behold the beings and glories of another world. The last utterance of the poet Wordsworth was: "Is that my dear Dora?"—a daughter deceased, whom he saw as it were with open eyes. If such occurrences were uncommon, or were always associated with some evidence of delirium, they might be passed over; but they are not very infrequent, and are known to take place in what appears to be a condition of calm rationality, in some, if not all, cases; and the

delirium of disease should evolve distorted phantasms rather than clear recognition of departed friends or sweet visions of heaven. If the cases were only those of mature age, we might suppose that the fading sense and wandering fantasy mistake for realities that which had been a matter of life-long thought or faith. But many young children, whose dying words or gestures must be regarded as called forth by no visual projections of their daily childish thoughts (which do not run in such channels), have, in seeming tranquil sanity and repose, beheld something like the heavens opened; pointing thither and uttering exclamations of delight, even describing objects that were apparently beyond their infantile range of imagination or foreign to it. And why should their visions, particularly, be so beautiful, when, in ordinary disturbed sleep and in sickness, their minds more often conjure up things frightful? Instead of referring these facts to a disordered or stagnant brain, we may fairly suppose that lethargy explains why the majority of the dying do *not* see the heavens opened until the soul is quite released. One may be averse to credulity and yet give due weight to the class of facts now under consideration.*

We have the further fact that, in life and

* Dr. Edward H. Clark (died 1877, medical professor in Harvard University, and in his day the most eminent

health, we are dealing with none but invisible beings. The materialist himself must acknowledge that the unknown quantity which constitutes personality, amid all the change and degradation of bodily tissue, is beyond dissection, is viewless, and that some organizing force beyond his ken precedes and accompanies organism. He sees not his fellow-man, but only an outward manifestation of an unknown force, be that force vital or chemical, or other. He who believes in a personal God acknowledges that there is, at least, one unseen being near us—one glorious inhabitant of an unseen world ; and he who believes that man is made

physician in Boston), in his book on "Visions," thinks that the visions of the dying can be explained physiologically; yet he says, "who will dare to say absolutely all?" He quotes two instances from Frances Power Cobbe's then recent article, "The Riddle of Death," and says that "it is difficult to give an adequate physiological solution;" one was that of a child intelligent to the last. From his own observation he gives a case where there was "no stupor, delirium, strangeness or moribund symptom indicating cerebral disturbance"—the patient dying suddenly of heart disease, up to nearly that moment conversing as pleasantly and intelligently as ever, and then unexpectedly revealing the vision by glowing features and delighted exclamation. In another part of the volume he speaks of the natural visions of childhood in life as unpleasant, thus confirming the above remarks about the great contrast between these and those of dying children.

in the image of God, accepting our spiritual nature, realizes that every human assembly is an assembly of spirits unseen. To him an invisible universe of beings is no far-fetched idea, foreign and uncongenial to his daily surroundings.

Besides, it is no new truth that there is much everywhere, before the eyes or other senses of men, of the existence of which they are and continue through life to be unconscious. But we may find fresh illustration everywhere; for example, in the contrast of man with other animals, or race with race. The lower animals perceive their friends, foes, or prey in ways impossible to the human senses. Some of them manifestly live in and are guided by a world of odors, unknown and well-nigh inconceivable to man; such is the solution that has been offered of the well-known instances when domestic carnivora have found their way over long distances where they certainly were not retracing impressions of sight. Tribes of men distinguish objects beyond the range of our civilized senses.

The limited nature of the human senses, whereby we may fail to perceive an all-pervading "second universe," has been greatly emphasized by the progress of science, since Isaac Taylor reasoned from it in his "Physical Theory of Another Life," half a century ago. Improve-

ments in spectroscopy and photography show that invisible rays extend as far beyond the violet end of the spectrum as the length of the spectrum itself, and, indeed, must continue until the vibrations "become infinitely rapid and infinitely small." Some of these ultra rays can be made visible by interposing a substance that lessens their refrangibility. Professor Stokes, the English physicist, found that when a tube, filled with a solution of quinine sulphate, was moved along the spectrum, "on arriving nearly at the violet extremity, a ghost-like gleam of pale blue light shot across the tube; . . . it did not cease to appear until the tube had been moved far beyond the violet extremity of the spectrum visible on the screen." The wave-lengths of the spectrum sun-rays have been measured, and we perceive only those that are from about one-forty- to one-sixty-thousandth of an inch; to all others we are blind. So of sound; the human ear, practically, hears only those sounds that come from forty to four thousand vibrations of the air per second, though the possible limit has been traced from sixteen to near forty thousand or more. The microphone reveals a new range of notes, and it is conceivable that this instrument, in connection with sympathetic and harmonic vibrations, may bring down to audibility still higher sources of sound. It is

not affirmable that any construction of mortal eye and ear could disclose the supernal; but it is certain that there is very much that is beyond the reach of our senses—an infinity of unknown vibrations around us. And the facts suggest that a great exaltation of senses, such as occurs in certain morbid conditions of the body, may sometimes bring to sight or hearing not phantasms, but realities, never perceived in our ordinary life.

Comparatively recent experiments on the senses offer another argument. Helmholtz, Weber, and others, by ingeniously devised tests, have proved that the larger part of our perceptions, such as those of the relief, size, distance, and direction of objects, are not intuitive nor direct, but acquired by inference, by years of comparison of the testimony of the different senses, especially in early life. Some of the lower animals, indeed, inherit much of this experience, as the phrase is; the chick picks up its food on its first day, as if with some knowledge of quality, direction, and distance, and certainly with some well-ordered muscular action; but its action is not so much intellectual and free as it is that inherited co-ordination of sensation with reflex nervous impulse, on which the life of the creature depends, and which is of the same sort with the seeking of the maternal fount by the human infant. The child

must for the most part learn by trial, comparison, judgment, because it is intellectual, free, progressive, not an automaton of instinct. Since, therefore, we know scarcely anything directly, our seeming direct knowledge of the outward world, and our seeming lack of such knowledge in regard to any spiritual world above it, are illusive. All our knowledge, save a few "necessary ideas," is inferential. It is no subject of just reproach that we believe in the unseen and eternal by the same mental process ; and assuredly there is enough in the material and moral world to justify our high faith, our spiritual vision, however indirect the evidence may be.

The new researches, above mentioned, reflect back much light on the old fact that the blind, when restored to sight, have to familiarize themselves anew with objects previously well known by touch ; at first, for example, mistaking one animal for another species : also, that Caspar Hauser, when first fronting a window, saw the exterior landscape only as an unmeaning splash of colors on the glass. All our presentative knowledge is thus but a slow interpretation of hints, signs, hieroglyphics, scattered and illegible in themselves, separately considered. We do not look out upon the world and see it as it is, until after long collocation and elaboration of the hints it gives

us, though, in maturer life, it appears to stand forth to our eyes in its proper shapes, distances, and expansion. It is a projected phantom, whatever may be its physical basis. Heaven, too, has its abundant hints, not less ascertainable and interpretable.

Men of science, least of all, should shrug their shoulders at mention of the unseen. The truth is, in this matter, they linger among the notions of the common crowd, to whom nothing exists where nothing can be touched; or they inconsistently give way to an impression that nothing exists that cannot be weighed, measured, dissected. In their own way they deal more with the hidden, the invisible, the vanished, or the future, than with the tangible. They are given to theory, and great in hypothesis, which word is but the Greek for the Latin-derived word supposition. Huxley pronounced the fossil horse-like animals of our western Tertiary—first, four-toed, then three, then with but one toe usable—his long-looked-for, final, and positive demonstration of the theory of evolution. It is certainly a good argument, and, in the absence of other contrary facts, strengthens a general and reasonable evolution “faith;” but it directly concerns the subject of horses, and no more absolutely demonstrates even their derivation than the finding of a variety of vehicles at different

depths in the ooze of the Missouri would demonstrate that a one-wheeled barrow was derived from a bicycle, this from a tricycle, and the tricycle from a four-wheeled "prairie schooner." As inferential, the equine argument may be accepted, so far as it goes; and inferential faith, founded on data and fair reasoning, stands good for both worlds, present and future, this being the point now made. Tyndall not only adopts the theory of an ether filling all space, but describes its qualities, and, indeed, concludes that it acts less like a gas or other fluid than a jelly—a universal jelly; so that we have, by inference, that much of something like solidity filling space. So with the astronomers; whether or not they see the heavens of St. Stephen opening, they believe, or did believe, that the starry heavens are slightly opening to the north, and, as a reasonable explanation of this, that our whole solar system is moving in that direction. In everything science reasons from the known, however slight, to the vast unknown; theoretical geology and chemistry are largely founded on this method; and this is essentially the kind of reasoning that establishes our belief in the invisible and spiritual.

But, what is matter, that seems so solid and certain, while the spiritual impresses us as shadowy and unreal? The jocular answer be-

comes more and more the sober one—"no matter." The materialists (and they are now metaphysical, aiming, as the word signifies, at something beyond physics) of late years would have us assume something quite unknown, of which so-called matter and mind are but the two faces. Isaac Taylor, long ago, following Boscovich's physical theory, reasoned that all we know of any outward world is motion—some motion in the organs of sense; and we might add that all we know of these organs themselves is the same. John Stuart Mill, who confined our knowledge to phenomena (that which appears), found his only probability of an outward world in the recurrence of the same series of mental images as he supposably walked the same supposable street. As to any material atoms, their existence was at first and is still but a convenient hypothesis, as we all are aware; and leading men of science now declare that we know nothing but force, and that science has become the study of that. But we do not know what force is in itself.

However, we are not now concerned with such questions except that, in every point of view possible, the great unseen, for which we have intimations and reasons, is as real as the seen, or more so. Enough that we know not the visible in itself, but only by some message it sends to us from afar; truly so, when it

seems nearest. This page of print, distant ten inches from the eye, is at the distance of five hundred thousand wave-lengths of light, a wide sea of ether, across which those mysterious waves must flow to us, like the inflowings of subtile influence from another world. In truth, whatever there may be exteriorly, there is no light, no color, as we apprehend these, outside of the mind. Let the vibrations cease, and everything vanishes; let molecules cease to give forth resistant force, and nothing is tangible. Since, therefore, the physical world is so tremulous, shadowy, spiritual, it is no presumption against a hidden universe that it affects us as something dreamy and unsubstantial. Granting that matter is composed of atoms, still there is nothing solid, except to our sensation. An eminent English mathematician has calculated that, in a piece of dense metal, the atoms must be as far apart as a hundred men would be when distributed at equal distances from each other over the surface of England; that is, one to every five hundred square miles.* Surely, no supramundane world can be much more at variance than that with all that we deem firm and substantial.

* Noted in a memorandum book (since lost or destroyed), and, if memory is not at fault, taken from a scientific periodical. It is not in the calculations of Sir William Thompson in *Nature*, Vol. I.

The visible is, at all events, transient; so that, if there be anything permanent, it must be invisible, and must be spiritual in some sense of the word that we need not, on this subject, attempt to define. Men come and go, laws are made and unmade, constitutions are changed, buildings crumble, but the invisible state or church endures. The Roman power existed twelve hundred years, and, in another form, still exists; but everything perceptible by the senses has so changed continually that the Eternal City of to-day is built upon twenty-five feet depth of its own accumulated ruins. The permanent, the eternal, are no idle words, and represent that which is in its nature imperceptible to our daily vision.

Our chief difficulty removed, namely, the sensuous prejudice against the unseen, we only need to recur briefly to the high probabilities in favor of its existence as an all-present reality. Man's immortality, in connection with the general order of nature, looks to a higher, wider, more universal stage of being than this; and, not to repeat the many natural and moral arguments for his immortality, it may be noted that occasionally a new fact in that direction, of a physiological sort least to be expected, is brought out; as, for example, in the observations of Brown-Séquard on certain cholera patients, whose minds remained clear and active

when their blood was becoming black and clotted in the last stages of the disease ; a fact inconsistent with the identity of mind and brain, since the latter depends on the blood for its activity.

Our longings to know the universe, and our beginnings in this knowledge, prophesy a free range through space. Still more, the full disclosure of the divine system and plans, as everywhere exhibited, is needed to explain difficulties and to complete our knowledge of the great Creator and Ruler, and this could be attained only in a state of existence admitting such free range.

Of late years, fresh illustration of the fact that life superabounds is made conspicuous, suggesting that there is no vast reach of space around us devoid of being, but rather a populous infinitude. So true is it that creation is crowded, within the limits of human observation, the phrase, "struggle for existence," has become familiar and famous. Darwin found, on a square yard of soil, thirty-two little trees battling for room ; on another square yard he counted three hundred and fifty-seven sprouting weeds of twenty different species. Every element and every possible habitat has its forms of life ; why not the field of space, occupied as it is by at least one substance, as science asserts ? Is all sentient being confined to a few starry

needle-points, while the rest is a desert, a void abyss, vacant of all interest ?

Here comes in the thought of the author of the "Physical Theory," already spoken of. All that we see of the Father's house and its many mansions, the far-scattered stars, is essentially alike, on the low plane of sensible matter. Is there no upward glorious superstructure ? And he adds that analogy also demands a destiny of boundless splendors and activities for those who begin their career on so vast a material platform. Here, too, comes in the thought of the poet Young, adopted by Dana and other students of nature : we trace a long-ascending series of life, reaching up to man, who is the first of a new series, the spiritual. Our new capacities proclaim an all-pervading, towering system as their destiny and counterpart and consummation.

Thoughts coincident with those of Isaac Taylor have been credited to him in the foregoing remarks ; and, besides these, in the line of the hypothesis now considered, he reasons from the less dense and the imponderable substances that pervade all nature ; from the range of creative work, as we know it, up and down between the infinitely great and the infinitely minute, and the boundless variety of that work ; and, among other original suggestions, he gives his theory of the connection of

mind with body as favoring the immediate experience of another state of life at death, one distant neither in space nor time.

The other remarkable book on this subject, entitled "The Unseen Universe," by two eminent men of science, Professor Balfour Stewart of England and Professor Tait of Scotland, is still fresh in the memory of many. They argue from the law of continuity and the apparent fact of the dissipation of energy from its centers into space, that the forces of nature must reappear in a higher, more spiritual universe, from which all visible things began, and in which they must lose themselves again. From the limited period of the universe, they infer a higher everlasting system as consonant with an eternal, infinite God. They also appeal to the intuition of immortality, and apply the law of continuity to man's continued existence beyond the visible.

Such is a sketch, not of the grand argument, which in all its yet unwritten fullness and completeness might employ a life, but of many of the considerations involved, old or new, or newly illustrated. The Christian believer, for himself, is of course satisfied with the brief hints in the Holy Scriptures. But of the doubter he may well ask if, in all the sublimity of a loftier, broader, endless life, of heavens opened to dying martyrs and dying children,

gleaming through the sacred histories, shining out in the dreams of poets, standing forth in the reasonings of philosophers, and accordant with the aspirations of sad, weary, Godlike humanity—if, in all this, man has outrun nature and overtopped the power of God himself? Has it not proved true that nature and God, as we come to know them better, far surpass our extremest reasonings and imaginations? The more we learn of nature, the more we find it full of hidden wonders and inexhaustible infinitudes. The more we learn of life, here on earth, the more does it open into bright heavens and yawn with dark abysses. If we are sure of anything, it is that every step leads on, still on, and up or down, to something beyond; and that if anything is temporal it is the seen, if anything is eternal it is the unseen.

V.

A UNIVERSE IN LITTLE—A DREAM.

I had been reading that sublimest of uninspired prose-poems, Richter's "Dream of the Universe," and, as I reclined upon the dewy grass on a clear summer night, was thinking that the immensities he pictures are after all but comparative to ourselves and our sparrow eyes and sparrow wings. If so, why should that which seems to us interminable vastness disturb our faith in creation, Creator, and Redeemer? Extension and succession may be necessities of thought, to doubt which would be to doubt everything, yet they may be but modes of finite apprehension. In fine, what have size, distance, and duration to do with any religious problem? What spiritual verity is to be determined by foot-rule or clock, by leagues or centuries? To God there is nothing great and nothing small.

While so thinking, I saw a seeming star shoot down from the zenith; as it neared the earth it expanded into the bright form of an angel, bearing a staff like a thread of lightning. The figure paused near me and breathed

the words: "Wouldst thou learn the brevity of earthly life, and what the world thou seest may be to the world unseen?" Thinking that I also should be blessed with the two wings Here and Yonder, and fly through immensity, I gladly gave assent. The figure touched me with the lightning staff; but no angelic strength flowed into me; no rainbow wings unfurled their ample breadth, but a sinking, melting sensation crept over me; I shrank rapidly, until I was diminished to an atom—so small that, in grasping for support at a particle of dust floating by, I fell headlong through a large tunnel-like pore in its very center. As the point of space into which I was compressed was at first just where the center of my former body had been, of course I was a few inches from the ground; down this dizzy height I continued to fall, until, just before I reached the earth, I became frightfully aware that I was about to be precipitated directly into a dew-drop! I drew in my breath, determining manfully to abide the terrific plunge, and swim for my life, although, as I descended an inch nearer, the drop expanded into a wide, shoreless ocean, as it were a whole round world of water. Alas! thought I, this is the penalty of my presumptuous curiosity. I endeavored to calm the wild tumult of my thoughts, that I might die with composure,

when, as I approached yet nearer in my quick descent, the dew-drop seemed no longer a sea, but apparently separated into a cloud of mist—then its particles widened still further, until they lay at seemingly immeasurable distances from each other, and glittered in the moonlight like little stars. I descended between them as into a wide, glorious universe of scattered suns!

! I had a cold bath after all; for, passing to the very center of the stellar dew-drop, I alighted in a deep, limpid stream upon the surface of one of its atom-worlds; it broke my fall, and perhaps saved my life. I crawled to the bank, and throwing myself upon the soft turf, sought to recover my breath and composure. Suddenly my eye caught a gleaming particle at my feet—a dew-drop within a dew-drop; how small it was you may barely guess, when you reflect that it bore the same proportion to the globules of dew you see upon the grass that those globules do, not to this immense earth, but to the whole visible heavens. I trembled lest the angel should appear, and touching me—a poor atom—I should be a second time diminished into an atom of an atom, and, falling into a second drop, I might be lost to myself in complete annihilation, even as I was already lost to my friends and the outer world. Shuddering at the thought, I looked up into the sky of

dewy particles, and although I knew it was all contained within a mere drop, yet so complete was the illusion, and so perfect the harmony of proportion between myself and everything else, that I could hardly believe I was not of my old gigantic human size, and looking up into the same old heavens. And if I were, thought I, might I not be laboring under a similar illusion; and may not the sons and daughters of Adam have just as arbitrary notions of their own size and importance, and of the bulk of their earth, and of the sublime distances of their stars, as the inhabitants of this to them invisible atom-world?

I have neither time nor inclination to describe the scenes and adventures I passed through in my atomic travels, but will merely give a few general results of my observations. It is sufficient to say that the little globe corresponded in many respects with that greater one, upon which its whole surrounding firmament of microcosms rested in the form of a sparkling dew-drop. That which struck me most forcibly at first was the fact that the computation of time upon this terraqueous particle, and the length of life enjoyed by its inhabitants, corresponded perfectly with the size of the atom. An hour with us was a thousand years with them, and consequently the ten hours of a summer night, during

which, only, the dew-drop (their universe) could exist, would be analogous to the time of man's existence, if we suppose that man began, say, nine thousand years ago, and that a final conflagration is to take place a thousand years hence. A year with them was equal to four seconds of our time, sixteen years to nearly one minute, and the most protracted life, four-score years, was completed in just five minutes. So inconceivably rapid, however, was the train of their thoughts and actions, and so crowded with events and enjoyments was their brief span of time, that their lives seemed quite as long to them as ours to us. They took a sound night's rest in the one hundred and eightieth part of a second, and I met with certain ladies and gentlemen of wealth and elegant leisure who complained bitterly of dull times and *ennui*, and who spent nearly all their lives in sleep, amusements, or at their toilets, the better to kill time and pass away long days which, by our computation, were only so many small fractions of a second. They reached their full stature and maturity in one minute from their birth, and were soon married, made or lost their fortunes, and in four minutes, at the furthest, after they had come of age, they sank into the grave with age and decrepitude. Their poets, indeed, were much given to discoursing upon the frailty

and shortness of life, but it was generally regarded as weak, innocent cant and common-place, for the memories of these ultra-microscopic beings could recall but little that happened a half-minute before (eight of their years) and they looked forward, at every age, to a long, leisurely life before them. Certainly, many of them occupied all of their five-minute lives in preparing for and building splendid edifices, and cultivating beautiful gardens and trees around them, as if they were to enjoy them more than one brief moment; many also were hoarding little heaps of gold-dust, every particle of which was as much smaller than the atom-world itself as a guinea is smaller than our massive planet.

So conformed was I, in mental and physical structure, to these little, rational, talking, laughing monads, and with such an unconscious velocity, corresponding to my size, did my thoughts, motions, waking and sleeping fractions of a second come and go, that at first I had great difficulty in keeping the human measures of time, and I could hardly realize that all these events were passing in a summer's night. In one thing I differed from them: the angel had endowed me with an atomic immortality, so that I became a great subject of wonder to the generation which arose after the one I had first fallen upon. All the noted philoso-

phers and doctors, by this time, began to flock around me, to know if I had adopted their several theories and modes of diet; and I was equally claimed as a living confirmation of their systems of practice, by the advocates of homeopathy, allopathy, and the water-cure. But the third generation of theorizing atomites, which arose four minutes after the last had died away, took no philosophical notice of me; I became an object of superstitious terror, and figured largely in novels and romances as a sort of haggard Wandering Jew, who was doomed never to die. About this time, for another reason, I was imprisoned in a dungeon, where I lay the rest of the night (their thousands of years) until morning broke and the drop exhaled. Before I come to this grand catastrophe, one word as to the state of science and politics with the inhabitants of this central particle of dew.

At the time of my first arrival, the prevalent theory was similar to that of Ptolemy; they supposed that, at a great distance from their terraqueous particle—perhaps the thousandth part of a hair's breadth—it was surrounded by all the other visible particles of the drop, revolving with inconceivable rapidity around the central one, and making an inaudible but sublime music of the spheres. Some twelve hundred years after (an hour and twelve minutes

with us), a new theory supervened, which made the drop stationary, the central particle revolving on its axis, and gave to the surrounding star-like atoms their true distances. Four hundred of their years later, instruments were constructed which put to flight their long-cherished idea that their little spangled globule reached outward in all directions invisibly and indefinitely, so that the whole universe was nothing but that drop infinitely extended, and making one interminable ocean of dew. They found its shape and bounds, and, moreover, discovered thousands of other dew-drops scattered all around them, which, with their telescopes, appeared like crowded firmaments of suns. This was a sublime advance in their knowledge, to be sure; but unluckily I ventured to assure them that there is a vast, substantial, enduring world around which all those clouds of stars were scattered in thick profusion, like the dew upon their own atom-world; that this invisible world would endure when their planet and skies of dew had been exhaled, exploded, and "no place found for them;" that the unseen world is filled with mansions, towers, palaces, and inhabited by beings as much superior to theirs and to them as they and their abodes were to any still more minute beings and habitations which they might imagine to be contained in a single drop from their flowing streams.

All this was received, at first, as a very good moon-story or Gulliver's tale ; but when they found I was in earnest, they shut me up as a poor deluded lunatic. In a little hollow atom of a dungeon, having one window grated with bars infrangible, yet invisible to a spider's eye, did I remain for the rest of the night, although to them and myself it seemed several thousand years. A king was on the throne when I was first confined, and my keepers were continued in office during life ; they succeeded each other in the freshness of youth, but, one after another, grew old and gray, and died. Toward morning a republic arose in place of the monarchy, and then there was a rotation in office every year—in other words, all public officers were ejected every four seconds.

But I hasten to the final and terrible catastrophe—the conflagration of the atom-world, which indeed was nothing more than the rising of our sun, and the evaporation of the dew. The increasing light of the dawn lit up the particles with a luster strange to the inhabitants of the atom, and unknown in all their history, for the drop which formed their vaulted heaven of stars had hitherto been only illumined by moonlight. As the light increased, their stars seemed growing in size, and shone with almost intolerable splendor, and it was generally believed by them that the whole

universe was rapidly approaching, as if on all sides it had conspired to crush their wicked little world. But their philosophers assured them that, at the most rapid rate, those stars would not reach them in hundreds of years. This soon quieted their fears, and they went dancing and laughing to their business and recreations. But soon there was light enough for them to get glimpses of our earth and its scenery, which had thus far been dark and viewless, for the moonlight only revealed the dew-drops; they grew terrified at the dim blades of grass which seemed like long streaming comets of a green sulphurous brilliance, and they shouted in terror at several moving forms of men, who were early going afield, and whose heads towered far above their utmost sight. Suddenly the sun looked over the eastern hills; they could not see its disk, but verily they could behold its warm rays, which came darting into the dew-drop—that is, their heavens, like broad, vivid sheets of lightning, long as the universe, and so thick and incessant as almost to melt into one vault of blinding fire! The outermost particles of the drop, which just before appeared like mighty suns plunging in wrath upon the atom-planet, now, as they evaporated, seemed to explode in crashing thunder and disappear forever. Nearer and nearer came the devastation; one by one—

may, by hundreds, they were blotted out, and their explosions shook the inmost atom of a world, where I stood in mute horror.

The dew-drop skies grew intensely hot to me and the inhabitants of the particle; our delicate senses could not endure it, and the gentle warmth seemed to us like a furnace heated seven-fold. The bars of my dungeon hissed to the touch, the walls cracked aloud; the keeper had opened it and fled, and I rushed out; horror-struck beings were running to and fro, and throwing away the gold to which they had frantically clung, for it blistered in their grasp; the streams simmered and went up in vapor; forests and cities took fire and burned to heaven; two armies, that a moment before were at the crisis of battle, tore off their scorching armor, and fell into each other's arms; some howled in agony, others faintly, and all around lay pallid corpses, whose distorted faces stood out ghastly in the quivering lightning. Louder boomed the crash of worlds, and the atom-planet on which I stood seemed just ready to explode, when—I awoke!

My dream was over; the noise and large pattering drops of a thunder-storm had awakened me. I sought shelter in my room, impressed anew with the thought that size, distance, time, are illusive and of little real

account. To celestial beings our lives may seem but a moment—time but a summer's night; to the angel who shall stand upon the land and sea, lifting his awful form to the skies, our visible heaven may seem but a dew-drop, and its rolling together as a scroll, if it is literally to pass away, but as the exhalation of the nightly distilled diamond of the grass. Then, too, the great invisible world may stand forth in its resplendent reality, like earth to the affrighted atoms, under the rising sun of eternity.

But will there be time at all, or, since that is metaphysical, will there be a consciousness of time, in eternity? Out in a sail-boat, running against the wind, with the waves coursing by, especially if we are near the shore or sighting any landmarks, we realize progress; but when we run before the wind, far from land, with only the blue dome above and the green water below, we seem to stand still. So may it be when we glide out into the ocean of eternity, away from all the signs and affairs of time. The present indices of time we cannot suppose to continue for us in the next life—rising and setting suns, clocks and watches, hunger and weariness, growth and decay. Here and now, if everything external and everything internal (such as bodily conditions and habitual rate of thought) that measure duration were to cease,

a day would become to us as a thousand years and a thousand years as a day.

In the little anonymous book, "The Stars and the Earth," now out of print, are some wonderful illustrations of the illusiveness of time. We see objects by the colored and shaded rays of light reflected from them. These rays are traveling out from earth into space, proceeding onward forever. If one could start from some inconceivably distant point and fly to earth in one moment, he would meet the rays that have been reflected from the earth in thousands of years, in the order of emission, and thus actually behold all the objects and events in those thousands of years in one moment. If the rate of movement and change of everything, personal, terrestrial, celestial, were either quickened or retarded a thousand times the present seeming rate, we should not know the difference; all standards of comparison would partake of the change. In the recently invented kinetograph, there is a similar suggestion as to rate and time.

But, in our own experience, time may become of small or no account. We have been deeply interested in something, and the hours have struck in surprisingly quick succession. A whole day has passed in absorbing work, and we exclaimed, "What has become of this

day?" When a great grief or joy came to us we took no note of time. Thus, far more, may all thought of time be swallowed up in the joy of the perfect life hereafter, or in the endless death. Lessing said: "It must be a great *ennui* to live forever." Yes, if the soul has not come to live out of itself in a great ever-inspiring Person and object, losing itself in the Divine glory; and yes, if eternal life and death are simply duration rather than spiritual states. This is eternal life, even here, to know God and Jesus Christ whom he hath sent. Our hymn-makers have risen to the truth that, in the greater life, "days and years revolve no more"—"time will be no more," and

"Beyond this vale of tears,
There is a life above,
Unmeasured by the flight of years,
And all that life is love."

VI.

THE KNOW-NOTHING PHILOSOPHERS.

Philosophical agnosticism was dismissed in the foregoing review of Huxley as something foreign to his range of thought and remark. There is an agnostic gospel of the metaphysicians, often underlying that of a scientific Philistine or adopted by him without troubling himself about metaphysics.

It is founded usually on sensationism—the doctrine that all our knowledge is derived from the senses. It takes the shape of phenomenism—that we know nothing of the supersensuous, nothing beyond appearances. In psychology it teaches that we have no knowledge of what the mind is, only of a succession of states of consciousness (its favorite phrase), as if these were all; and a special fad among the psycho-physiologists is not only to ignore but even scout the idea of an ego, a soul. More widely, it ignores any substratum of the universe, material, spiritual, or Divine. In a strictly metaphysical form (ontological) it may or may not be connected with sensationism; it talks of things in themselves as

unknowable, insisting that we can only cognize relations of things to each other and to our apprehension, and hence really know nothing of existences. In any form, it is fond of speaking of God as unthinkable, inconceivable, unknowable, unrepresentable to our minds. Under the name of nescience, it may either assert that we do not know, or it may go further and say that we cannot know, anything of being as such.

A prolonged study of the history of philosophy is necessary if one would understand well the subject thus referred to. It is in place here to make only a few running remarks for the general reader.

The know-nothing philosophers say that the infinite, the absolute, the unconditioned are merely negative words—the not-limited, the not-dependent, the not-conditioned, meaning nothing real and positive. But a negative word may mean much. Independence is a negative word—the not-dependent; and when our forefathers fought for it, they were not fighting for nothing, but for something very real and important. When a tribe of savage islanders first saw an ox, and named it the “not-dog,” it was a substantial ox nevertheless.

We are told that we get our idea of the infinite or absolute by thinking away all limitation, removing it and leaving nothing, or at

least by the vain attempt to do so until we tire of the effort to reach the boundless; and thus, we are even told, our idea is the product of our weakness, our imbecility. But, the truth is, all this is a vain attempt to imagine the infinite—to make it an imageable thing, bounded by lines, and then to expunge these or push them out more widely—to magnify something endlessly. We are so prone or so constituted to think of all realities under the forms of sense and imagination that we are all liable to this mistake. Do we think of space as an area whose bounds we remove or enlarge? If so, we are not thinking pure space, but of a figure in it. Do we think of God in the same way? We are only attempting to figure His infinitude, which is impossible and absurd. Yet, the nescient philosophers, down to this day, are continually saying that God (and much besides) is unthinkable, inconceivable—betraying their fallacy by also saying we “cannot represent it to ourselves.” A God that, as God, could be represented is no God. We cannot even conceive our own finite minds in any such sense. Herbert Spencer is sure we cannot know God as self-existent, infinite, and eternal; but he apparently has no difficulty in conceiving matter and force as such.

We are further informed that to think any-

thing about the infinite is to think that it is one thing and not another, and hence to limit it—that, to regard God as having any qualities, attributes, or as related to himself, to his acts, or to his universe, is to restrict him, to “condition” him, as the term is, because to be or have this or that is not to be or not to have something else. This is the metaphysical God of the nescientists. Certainly, we know nothing about such a God. If a being have no attributes, nothing that can be thought, affirmed, or denied in regard to it, then it is nothing. As one has said, it is pure, absolute, unconditioned nonsense. They are welcome to it. But it is not philosophical. The absolute does not exclude all properties and relations; it only excludes those which are opposed to the idea itself, such as dependence, derived existence, limited degree. It does not exclude being, wisdom, power, holiness, justice, goodness, and truth. Infinite Space does not require us to attribute nothing, think nothing, for it must be different from infinite Time. We can deny that to it; we can affirm something of it—that it is that in which forms are projected.

But, the metaphysical nihilists declare, we have no knowledge of anything in itself, apart from phenomena and apart from our modes of perceiving and thinking. Well, who wants to? Who wants to know copper or cobalt apart

from gravity, form, color, all physical and chemical properties, all uses, all manifestations of itself? What is matter or mind to us aside from its attributes? What is the Most High to us without any revelation or manifestation of himself and his perfections? To all intents and purposes, the attributes of anything constitute itself. Moreover, could any being or thing be known at all except by some indication of itself to soul or sense? What a waste of words to tell us that anything can be known only in the ways in which it can be known—an identical proposition that the writer of this added to a definition of one phase of nescience in a recent dictionary.

And what is the use of assuring us that a thing is known to us only according to the nature of our cognitive faculties?—that it might be differently cognized by different beings—that knowledge is relative, not absolute? It all amounts to this very wise discovery, that there cannot be knowing without a knower, and the knower knows according to his knowing power. That is no news, nor a very profound philosophy. $A = A$; $2 = 2$. To know Saturn's rings through a telescope does not cheapen or invalidate the knowledge, provided the telescope be well made and errors are duly guarded against. To cognize a truth by a cognizing faculty does not hurt the cog-

nition, and alone gives the cognition. If our faculties tell us lies or but half-truths, we must depend on these same faculties to detect the error. And, if man be made in the image of God, with Divine endowments—capable of knowing and akin to God—there is no reason why man should not have a true knowledge of God, so far as the knowledge goes. We have not a complete knowledge of the practically boundless and inexhaustible universe ; but, because of this, no man of science would condemn his knowledge as worthless.

And, if the infinite be unthinkable, what are the nescient philosophers talking about ? Even Herbert Spencer admits the force of such a query. He remarks : “ To say that we cannot know the Absolute, is, by implication, to affirm that there is an Absolute.” He only claims that we cannot know what it is. Certainly not its very essence, known only to God himself.

But we may go further and claim that our knowledge of the Infinite and Eternal is founded on the most fundamental and certain of all our knowledge. Intellectually, we know in two ways, by intuition and by inference—even our sense-knowledge being inferential, as abundantly proved by experiments in physiological psychology. Intuitively, we have ideas of space, time, cause, right, free will, etc., in-

cluding the uniformity of nature (for example, if this fire burns, that will also), presupposed in all experience, necessary to experience, not the result of it. As primary ideas and laws of thought, they are the most certain of all things. And these ideas involve the great First Cause and its perfections. Take the order of nature—that it works not by chance but by method, a rational method, one akin to our rationality, and that may be anticipated, tested, known by our reason. This alone involves the truth of a creative and governing Reason, the greatest and truest of truths. The ideas that center in God are at the foundation of all our knowledge.

True, our knowledge of Him is obscured by ignorance and sin. And this is why he has revealed Himself, not only in nature, history, and the soul, but in the glorious Gospel of his Son. And this is the reason that Paul stood up at Athens and said of the altar to the "Unknown God"—not as Sir William Hamilton foolishly said, it is "the last and highest consecration of all true religion"—but in memorable words that sound on forever, "Whom therefore ye ignorantly worship, him declare I unto you—God that made the world, and all things therein," and taught that men "should seek the Lord, if haply they might feel after him and find him, though he be not

far from every one of us, for in him we live, and move, and have our being." And a greater than Paul said, "Blessed are the pure in heart, for they shall see God," and "He that hath seen me hath seen the Father."

VII.

SOME MORAL ADJUSTMENTS.

On a previous page is a note mentioning the Hebrew legend that, when Moses was writing the words "Let us make man in our image," he demurred at the plural as open to misconstruction in respect to the Divine unity; but the Lord answered him, "If any man love to err, let him err." The note referred to Canon Cheyne's mention of this misconstruction of the sacred text in a way implying that it really has enough weight to be worth repeating.

Many must have remarked that seemingly in everything the universe has left the way open to perversion, if men choose to pervert, so that no one is forced to act or to believe in the right direction, contrary to the great principle of freedom. Enough is intelligible and decisive in the right way, if one will take in the whole given case, but he is at liberty to prefer and follow the wrong road in intellectual and spiritual as well as in moral matters.

And the adjustment of pros and cons often seems to be very nice, in order that men may be obliged to exercise care, discrimination,

comprehension, and to the further and higher end that they may test and discipline themselves and be tested. Has this wonderful nicety been considered? Not that the Creator exercised anything like a special and human calculation in this regard, but the very nature of things, proceeding from him, involved this and all other arrangements.

That there may be such an adjustment with reference to human care and choice, is illustrated alike by common and by extraordinary facts in nature, such as those that exhibit an exactly adjusted coördination of things not of the sort that might be explained as due to evolutionary interaction or to self-adjustment. Who has not noticed, for instance, that sunlight creeps up or down the wall of a room precisely so slow that the movement is not directly observable, yet so fast that one wonders to see that momentarily it has moved before his very eyes without his detection of the motion itself?—as if it were purposed that he should not be disturbed by seeing the motion, while at the same time he is every moment warned of the flight of time by the stages of continuous progress of the light and the following shadow.

A more extensive illustration is a fact about which Huxley argues in one of the volumes reviewed. He is replying indignantly to the

Duke of Argyll, who had affirmed that men of science had sought to suppress Murray's new theory of the formation of coral reefs, namely, growth of the reef on one side and solution of it on the other—the alleged suppression being attributed to worship of Darwin's theory that the facts of coral reefs and islands imply a continuous subsidence of peaks and ridges—in atolls quite submerged. No better example of nice adjustment in nature could be found, of the kind due to no interaction of the things adjusted. The coral-polyps cannot live at a greater depth than one hundred or one hundred and twenty feet. Hence for many ages and over the vast area of the Pacific there has been a continuous subsidence, just slow enough and just fast enough for the polyps to live and secrete coral within the comparatively slight depth of that hundred feet. The annual growth upward of the reef is very small, and the depth of the reefs reaches in some instances thousands of feet.

Coming to the intellectual world, how perfect are the arrangements for free opinion and choice. For example, how precisely does much that we know seem to admit of a materialistic or pantheistic view, and at the same time give a balance in favor of a theistic belief when all things are taken into careful account. The adjustment is so nice that one who takes in all

the considerations, is familiar with them, and is well established in Bible faith, must, if he thinks much of these subjects and on all sides, keep constantly in mind the reasons that counterbalance the temptations to doubt. How narrow the line to a careless apprehension between a God immanent in the universe and a God confounded with it and lost in its forces! How difficult, when we ponder upon it, to conceive of a consciousness, reason, and will independent of an organism like or analagous to our own; and thus how hard it is at times to hold firmly to the Divine personality, and even to man's immortality. It may be only by keeping steadily in view the reason and righteousness in the universe, or by assuring ourselves that the created stream cannot have perfections that are not also in the Creative Source, that we can save ourselves from sinking God in the universe. With the reasons for man's immortal nature most persons are more familiar, yet alike for this and for the Divine personality, a believer may often be reduced to the one sufficient support—the Revelation of God and immortality in Christ; he may find himself otherwise too perplexed.

In regard to the agnostic attitude, in a sense higher than Huxley's mere call for forensic proof of facts, how closely does the acknowledged truth that we know very little, at best,

come to the error that we in effect know nothing of the great realities behind the veil. We may need to fortify ourselves often with arguments for the unseen, or, dismissing all, stand firmly and only on the truth of "God manifest in the flesh and received up into glory." And even here, raising no question about incarnation, resurrection, and ascension, we may have to fix our eyes steadfastly on "His glory, the glory of the only-begotten of the Father, full of grace and truth."

Turning the leaves of the Bible, how easy, as we have seen, to get up a conflict of science with the inspired teachings, such that it may require careful examination to show that there is no ground for such conflict. Or how readily can one invent and apply almost any little theory to the sacred books as other than what they purport to be, especially when evolution, apparently valid in the physical and organic world, has become a fashion in treating of the history and arts of man, even of our national flag or of a simple machine. Readily, too, under the borrowed name of the higher criticism (which has its proper place and work as distinguished from textual) can every one, in his own ingenious way, disintegrate the Scriptures as well as anything else in literature, overlooking the grand Divine impress on the sacred book.

It is even quite supposable that the Providence and the Spirit that brought that volume to pass purposed that it should not in every part, from beginning to end, be such a smooth road that even those who choose to stumble could find no stumbling-stone, or at least intended that some things in it should exact careful and candid examination and other things demand a docile and valiant faith to accept. We all know what those things are, for objectors of every sort, from the learned skeptic down to the bar-room mouter, have them always at their tongue's end; and all persons who will can find the explanations or justifying considerations that have been set forth by those who have made the Scriptures a reverent study.

It is no wonder that the half-educated stumble about in this as in other intellectual matters. Ordinarily, they cannot hold their minds to one thing until they have fathomed it, and their knowledge is a fragmentary jumble; in most instances they have settled no question, no truth, no principle of judgment, firmly and forever; and, if they are anchored at all in religion, it is by inheritance or directly by the Christian hope and faith. But, the highly educated have no excuse for not giving what time they may to serious, candid, real study of that

which is by common consent the greatest and best of books, availing themselves of the studies of those who have made it their special work not so much to dissect the text as to know what is "the mind of the Spirit," such as the greatest and most spiritual of the modern commentators. And what excuse is there for the highly educated who read the Bible only in the captious spirit that is evinced by their speech or writings, and are turning away others, especially their weak fellow-men, from that which multitudes, high and low, have found to be a fountain of light and life? What was the woe pronounced by the Savior on those who cause the weak to stumble?

The same train of thought might be carried into morals. It is easy to pervert nature as well as Scripture. Things are so adjusted that a man may take one view or another as he chooses, and follow the one to a bitter or the other to a glorious end. If any man love to err, let him err. No one is compelled to see and follow the right. So far as we can see it was a purpose in the creation of intelligent beings that they shall have their own opinion and their own way now and forever—yes, that it is involved in rational intelligence itself and the power of choice. "He that is unjust, let him be unjust still; and he which is filthy, let

him be filthy still; and he that is righteous, let him be righteous still; and he that is holy, let him be holy still." And they who take the wrong road would be the first to complain if it were not so.

VIII.

THE CHRISTIAN'S AGNOSTICISM AND GNOSIS.

Speculation as well as criticism aside, we turn to problems and experiences that come home to the individual Christian. A good many know-nots, and as many knows (gnosis, knowledge, but not gnosticism), could be found in the Christian's ripe experience as well as in the language of the Bible. But, to him all is summed up in Christ, "whom, having not seen, we love, and in whom, though now we see him not, yet believing, we rejoice with joy unspeakable and full of glory." This is the supreme knowledge by faith and love; it was the patriarch's "I know that my Redeemer liveth," and Paul's "I know whom I have believed." On this the apostle soared to his sublimest heights, as when he prayed that the Ephesians might comprehend with all saints what is the breadth, and length, and depth, and height, and to know the love of Christ, which passeth all knowledge, that they might be filled with all the fullness of God.

A glowing devotion to the Lord Jesus Christ, as a great unseen presence, an indwelling and all-inspiring reality, has been the life and power of the Christian religion in its purity, from primitive times to our own. It beamed forth in the midst of superstition. St. Catherine of Genoa sought to verify the words "I live; yet not I, but Christ liveth in me." Thomas à Kempis speaks of the love of Jesus as above all things and of the familiar converse we may have with him. The zealous Loyola named his order the Society of Jesus. And the multitudes now of every name, who make the Word of God their daily food, are those who know and sing the love of Christ.

It is just that highest, mightiest motive which all need—a personal love, surpassing all abstract devotion and lifting us at once out of our poor selves—yes, raising us at once to the highest object, him who is the brightness of the Father's glory, and at the same time the ideal man. It has a living power not to be found in contemplation of deity as such or humanity as such; it embodies and unites the two, so that in devotion to Christ we are devoted to both God and man, and this is reason enough for the Incarnation; and it quickens this piety and humanity by intense sympathy with the filial, humane, sympathetic Son of God himself. It enlists, too, all the

powers of our nature, for he who is the Truth, the Right, the incarnate Love, the Ideal, addresses all the high elements of our being. It is the personal regard that has no dangerous extreme, as Thomas Arnold explained, for it finds in Christ the concord and balance of all virtues and graces; and so it is the one grand molding and perfecting power. And, as it sustained the early martyrs to their last breath, voiced in their outcry, "None but Christ—none but Christ!" so it is ever the one unfailing strength and inspiration. No wonder that in the apostle Paul it repeatedly shows itself as a great gathering tidal wave, rolling through long passages of eloquence and piling up in volume, power, and splendor, to the utmost of expression, as in the outburst that begins "Who shall separate us from the love of Christ?" That sacred name, in the Christian's experience, grows in brightness and might until it comes to be the one word that always has power to restrain, to subdue, to melt, to kindle, to vivify, to uplift, to incite, to impel. This is life eternal to know the only true God and Jesus Christ whom he hath sent.

In comparison with this knowing, of what account is it that we know so little of the great Beyond?—though the little is much—a spiritual body, and an abode of some sort com-

parable to a Father's house of many mansions, together with the society of Jesus and the blessed. What we do not further know and what we further do know is summed up in the remarkable words: "It doth not yet appear what we shall be, but we know that, when he shall appear, we shall be like him, for we shall see him as he is."

Is this too much to know? Is it incredible that all our conscious imperfection and unworthiness shall then be removed as dross and the likeness to Christ be made complete? Even here, "with open face beholding as in a glass the glory of the Lord, we are changed into the same image from glory to glory"—if only we behold. There are those whose faces in life and in death begin to shine with that reflection, the light of the Lord. The final transfiguration of the soul is not too much to hope; it is promised in the New Testament, and even affirmed by the penitent Psalmist—"As for me, I will behold thy face in righteousness: I shall be satisfied, when I awake, with thy likeness." When Jesus appeared to his poor, stumbling disciples as the risen Lord, and when he ascended into glory, what a sudden and wonderful transformation came over them—no longer his weak, blind followers, but henceforth his radiant, heroic apostles—a

change that no agnostic unbelief, in these times, can account for.

If we hesitate to say "we know we shall be like him, for we shall see him as he is" in his full spiritual glory, we may somewhat assure ourselves by the effects of literal sight in many earthly experiences. All true seeing tends to transform, in some sense. We look upon the ocean, for the first time or repeatedly, with souls open to receive the mighty impression; there is the solemn boundless blue, with its solemn sound and awful associations; our being expands to comprehend the glorious mirror of eternity, of God; and we turn away at last, never to be as if the profound impression had not been received. An image and idea of the infinite remain, and long after, to life's end, "though inland far we be, our souls have sight of that immortal sea." So when we stand before a great cataract, as if before a throne of the Eternal; there are the emerald and sapphire, the cloud of incense, the white wings in motion, the rainbow round about the throne, and the thunderings and voices of many waters; and the impression shines on and sounds on in the memory forever as a symbol of heavenly vision. Looking from a high mountain, how the busy world falls away and fades—how near we seem to God, and how his greatness weighs

upon the thoughtful mind. If these works of God, ocean, cataract, mountain, so exalt and expand a reflective soul, how may not the Christian be wrought upon by the presence of the glorified One in his spiritual greatness?

Even the slightest things may work wonders in one prepared to see them. An American sculptor grew up in the backwoods of Maine; he came to a city and saw in a shop-window a cheap plaster-cast copy of sculpture; from that moment he was another being; the bud of genius burst into sudden flower. More than one youth has in due time glanced at a piece of mechanism, and from that moment become an inventor, dropping his past trivial thoughts and diversions, and springing at once into new power. Since a first sight of that which is less than the glories of nature may effect such changes, to what spiritual height may the believer tower when he beholds the spiritual world and Him who is its light!

We shall "see Him as he is"—no more with narrow and distorted vision, no more with rudimental eyes, no more in the fragmentary lights of Scripture and Providence, and in earthly experiences and glints of circumstance, and no longer in our "little systems" that are but "broken lights of Thee." And will not the soul then feel and say, Is this the adorable One of whom or whose principles I was sometimes

ashamed, against whom I sinned, whom I served so poorly? Will not a whole-souled devotion flame up in the heart forever? Then we shall see how faithful he has been to us in all our waywardness and wandering; we shall see his faithfulness, in the words of the Psalm, as reaching unto the clouds, his righteousness as the great mountains, his judgments as a great deep, and shall say, how excellent is thy loving kindness—in thy light we see light! Will not his purity strike through the penitent soul and consume all remaining unholiness? Will not his felt wisdom raise the spirit above all groveling? Will not his love bathe the soul, and so fill the soul as to leave no place for sin and folly? Christians are often erring because they do not appreciate the whole character of Christ. And now, when they see him in some fresh light, what a new impulse it gives, what a balance of feeling it restores. When we are no more children, tossed to and fro, in this distracting life, and come into full knowledge of the Son of God, will it not be “unto a perfect man, unto the measure of the stature of the fullness of Christ”?

The visible presence itself of the Lord in his glory may secure sinless exaltation in those who have not seen him on earth and yet have believed. There is that in the sight of a person who embodies a great principle that brings it

home to us with power, and almost lifts us to his level for the time. There is a magical power in presence; when a hero comes, it is well said, all men become heroes. There is often a strange power in presence, aside from special quality shown; we feel absorbed into the being of some whom we meet. There is a silent and mighty influence that radiates from a great and good character—even a kind of effluence from the evil. Infinitely greater will be this radiation of influence from Him who alone is good and great, and from whom flow ever the waves of the Holy Spirit—that Breath which he breathed on his disciples, a sanctifying and empowering impartation.

Practically, there is one expression, sometimes heard, which may go far to confirm the great expectation. It is the heartfelt words, "Oh, I see it all now!" A man has been averse or indifferent to a good cause; but light breaks in upon him, and with noble confession and new zeal he exclaims: "Oh, I see it all at last—how erring my course—how Divine is this cause." A person opposes or neglects a dear friend; but at last the guilty mistake is seen, and tenderly comes the acknowledgment: "Oh, I see it all now—how perverse I have been—how good and patient you have been." And may not the seeing of the Lord as he is be largely the seeing of ourselves as we have

been, in his gracious light? Shall we not say, "Oh, I understand all now—how apathetic, how sinful, I have been—how needlessly imperfect my love and service"? And will not the seeing of all we have been, in that Divine light, become the being of all we should be?

There is an expression, too, not in words but of face—the face of the dead—that suggests the great spiritual transformation on the threshold of the everlasting. Who has not seen it—a look as if the closed eyes were gazing in holy, happy awe on the vision of God himself?—a heavenly look of perfectness. Blessed are they whose life and death do not belie that expression—blessed, whose Christian life renders it a consolation and a revelation. To see nature, it must be mirrored in the eye; to see God he must be mirrored in the heart and life. Blessed are the pure in heart, for they shall see God.

If Christ were to come, not to this or that city, but to us all in the literal sense that some look for him, who that loves him would not welcome him, though with felt unworthiness and trembling joy; and would not our sins and follies drop from us in his presence, and our souls be lifted to perfect oneness with him? Enough that some time, somewhere, we shall see him as he is. And enough that he stands at the door, and if any hear his

voice and open the door, he will come in to them, and make his abode with them. With him as the perpetual heavenly Guest, all doubts, all denials or trials of our faith, are as idle winds that have no entrance to the illumined heart, no place by its fireside, no power to give a flicker to its flame. We know whom we have believed.

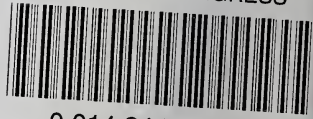
Deacidified using the Bookkeeper process.
Neutralizing agent: Magnesium Oxide
Treatment Date: August 2005

PreservationTechnologies
A WORLD LEADER IN PAPER PRESERVATION

111 Thomson Park Drive
Cranberry Township, PA 16066
(724) 779-2111

p.
1210

LIBRARY OF CONGRESS



0 014 244 382 A